

Component	Math
Grade Level:	1st Grade
Lesson Title:	Count Down #1
Focus:	Learning Each Math Lesson Segment

Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1. White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

Problem of the Day *Activity -> Teachable In this segment you will have a problem to work through with the students. You will want to Moment(s) *throughout* draw a picture of the problem so they can see that the words are connected to the numbers During the lesson check which represent the story. in with students You have 4 squares and 3 triangles. How many shapes do you have altogether? repeatedly. Math Facts Check in about what is happening and what they The Fact Practice activity will be the same every day for 1st graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are are thinking. appropriate for the grade level students are in. Take advantage of any teachable moments. Fact Practice Stop the class and focus Kindergarten--Counting on a student's key learning or During the month you will work with Kindergartners to reinforce the number sense of understanding. Ask corresponding the numbers said with an actual number of objects. To help them do that you open-ended questions to will create number book. After working with the Kindergartners, if they can verbally count from determine what the rest 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them of the group is thinking. to learn those numbers by helping them with this book. You can always do more than one When possible, engage page of and single number if you need more time to reinforce counting. students in a "teach to learn" opportunity and For the next 10 days work together to create a page together so the Kindergartners will have the student become understand how to do this on their own. Use dice or cards to determine the number you will the teacher. be making out of object. Create large pages out of butcher paper. First Grade—Fact Families (They will have different fact families each day)



Fact Practice for 1st grade is looking at number	families, so you are looking at both addition	
and subtraction. The key is for children to learn	that numbers have a relationship with one	
another in adding and subtracting. Fact practic	e will follow this pattern every day.	
Children will look at the math family. (We will b	egin with 1 more, then 2 more, etc.)	
They will write the problem in four ways.		
1 + 2 = 3		
2 + 1 = 3		
3 - 2 = 1		
3 - 1 = 2	e they will find a partner and cay	
After they have written the problem in all 4 ways "If $1 + 2 = 2$ then $2 + 1 = 2$ "	s they will liftu a partifier and say,	
If $1 + 2 = 3$, then $2 + 1 = 3$. The other student will respond with "Vest and s	inco that is true $2 + 1 = 2$ and $2 + 2 = 1''$	
You should have them practice this conversation	(a + b) = (a + b) + (a + b) = (a + b) + (a +	
students every day. On the 5th day, you will util	lize all 1 problems from the days before, and	
the conversation will follow the nattern but the	second responder will need to quickly look	
through his/her cards (of course we hope they	remember without looking) and gives the	
correct response	emember without looking/ and gives the	
Today you will introduce this activity and begin	with the Fact Family of 2, 8 and 10	
Have students write the entire Eact Family on the	he white board	
2 + 8 = 10		
8 + 2 = 10		
10 – 2 = 8		
10 – 8 = 2		
Bring two students up to practice the conversat	ion.	
Try it again with several other pairs of students.		
Then have children find a partner and practice t	the conversation. Do this at least 4 times.	
Remember that today they are only doing the F	act Family of 2, 8 and 10.	
Math Va		
IVIALIT VO	cabulary	It is important to review
Each lesson will also have a vocabulary word th	cabulary hat is appropriate for the grade level. The word	It is important to review academic math
Each lesson will also have a vocabulary word the may be reviewed more than one time. Youth n	cabulary hat is appropriate for the grade level. The word eed to complete the vocabulary entry in an	It is important to review academic math vocabulary often
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Math Activity

Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.

Step 1: Basic Information

Student Practice

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.

Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
- Give a demonstration or a "for example"
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.

Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.

Step 4: Open Play

- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) **Note:** If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.





Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.	
 Step 5: Play Have students play the game.' Circulate and answer questions as needed. Debrief the game at the end asking students: What skill did you practice? What did you learn? What about the game was enjoyable? What makes you say that? How would you have taught the game differently? 	
Game for the Day Count Down! Materials: Deck of Cards (remove face cards and jokers) Players: 2-4 Purpose of the game: Practice counting backwards from 10 to ensure the student understands the relationship between numbers, one greater, one less, etc. To win, the cards will be in four stacks with 10 on the bottom and the ace or 1 on the top.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 Directions: Shuffle the cards. Make a 3 x 3 grid of cards, face up. (A grid that has 3 columns and 3 rows), Place the remainder of the cards to the right of the grid. Player one looks at the cards and stacks cards in backwards order, putting the smaller card on top of the larger number. Player continues to stack until there are no more additional moves. If player creates an entire stack 10-1, then he/she turns the stack upside down to show that it is no longer in play. When Player 1 finished his/her turn, Player 2 places cards from the remaining deck to re-create the 3 x 3 grid. Player may move a stack to another card. For example a stack of 3-2-1 could be placed on a 4. 	
Play continues until there are four stacks, 10-1.	

Closing

Review

Say:

- Please recap what we did today. Did we achieve our objectives? •
- •



Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" student getting ready to do this activity?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	1st Grade
Lesson Title:	Count Down #2
Focus:	Math Processes

Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1. White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

Problem of the Day In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story. You have 10 pennies and you are given 3 more. How many pennies do you have?	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in with students repeatedly.
Math Facts The Fact Practice activity will be the same every day for 1 st graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.	Check in about what is happening and what they are thinking. Take advantage of any teachable moments.
Fact Practice KindergartenCounting During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting. For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.	Stop the class and focus on a student's key learning or understanding. Ask open-ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
First Grade—Fact Families (They will have different fact families each day)	



Fact Practice for 1 st grade is looking at number and subtraction. The key is for children to lear another in adding and subtracting. Eact practic	families, so you are looking at both addition n that numbers have a relationship with one so will follow this pattern every day	
Children will look at the math family (We will h	pegin with 1 more then 2 more etc.)	
They will write the problem in four ways		
1 + 2 = 3		
2 + 1 = 3		
3 - 2 = 1		
3 - 1 = 2		
After they have written the problem in all 4 way	s they will find a partner and say	
"If $1 + 2 = 3$, then $2 + 1 = 3$ ".		
The other student will respond with "Yes, and s	since that is true $3 - 1 = 2$ and $3 - 2 = 1$ "	
You should have them practice this conversation	on (exactly as it is written) with 3-5 other	
students every day. On the 5^{th} day, you will ut	lize all 4 problems from the days before, and	
the conversation will follow the pattern, but the	second responder will need to quickly look	
through his/her cards (of course we hope they	remember without looking) and gives the	
correct response.	i i i i i i i i i i i i i i i i i i i	
Today you will introduce this activity and begin	with the Fact Family of 2, 8 and 10.	
Have students write the entire Fact Family on t	he white board.	
2 + 8 = 10		
8 + 2 = 10		
10 – 2 = 8		
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Bring two students up to practice the conversa	tion.	
Try it again with several other pairs of students		
Then have children find a partner and practice	the conversation. Do this at least 4 times.	
Remember that today they are only doing the I	Fact Family of 2, 8 and 10.	
Math Vo	cabulary	It is important to review
Each lesson will also have a vocabulary word	hat is appropriate for the grade level. The word	academic math
may be reviewed more than one time. Youth r	leed to complete the vocabulary entry in an	vocabulary often
Academic Vocabulary Notebook The Vocabu	ary section will follow this pattern. We will	throughout the day.
practice working on this for the next 11 days		Complete the Vocabulary
Word for Today, triangle		notebook for each word
		When neccible, have
Description: A 3-sided shape.		students experience the
Complete the journal entry in your Vocabulary	Notebook. In space I, write the word. In space	word (Ex. 4 students
2, explain the word in your own words. In space	ce 3 use the word in a sentence. In space 4	creating a right angle
demonstrate your understanding of the word b	y drawing a picture of the word.	multiple students acting
		out an equation)
Vocabulary Notebook Sample:		Vacabulary Natabaaka
New Word	My Description	vucabulary NULEDUUKS
		composition book
triangle	A flat shape with 3 sides and 3 angles	
		It is important to review
Personal Connection	Drawing	academic math
		vocabulary often
What is shaped like a triangle?		unoughout the day.

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Step 4: Open Play

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Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.	
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- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	1 st Grade
Lesson Title:	One More
Focus:	Learning Each Math Lesson Segment

Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1. White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

· · ·	
Problem of the Day In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story. John has 8 pencils. Jill has 3 pencils. Jorge has 5 pencils. How many do they have altogether?	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in with students repeatedly.
Math Facts The Fact Practice activity will be the same every day for 1 st graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.	happening and what they are thinking. Take advantage of any teachable moments.
Fact Practice KindergartenCounting During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.	Stop the class and focus on a student's key learning or understanding. Ask open-ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and
For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.	have the student become the teacher.



Have students write the entire Fact Family on the white board. 2 + 8 = 10 8 + 2 = 10 10 - 2 = 8 10 - 2 = 8 10 - 8 = 2 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. It is important to review academic vocabulary the Fact Family of 2, 8 and 10. It is important to review academic vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days. It is important to review academic math vocabulary often throughout the day. Word for Today: counting number Description: A number that you can use to count things. It does not include 0 since 0 means nothing. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebook Sample: My Description Word Ny Description Numbers used to count things like 1, 2, 3, 4, and 5 It is important to review academic math vocabulary often throughout the day.	First Grade—Fact Families (They will hav Fact Practice for 1 st grade is looking at numb and subtraction. The key is for children to lea another in adding and subtracting. Fact prace Children will look at the math family. (We will They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 w "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and You should have them practice this conversa students every day. On the 5 th day, you will the conversation will follow the pattern, but th through his/her cards (of course we hope the correct response. Today you will introduce this activity and beg	The different fact families each day) ber families, so you are looking at both addition arn that numbers have a relationship with one ctice will follow this pattern every day. Il begin with 1 more, then 2 more, etc.) ays they will find a partner and say, d since that is true, $3 - 1 = 2$, and $3 - 2 = 1"$. ation (exactly as it is written) with 3-5 other utilize all 4 problems from the days before, and he second responder will need to quickly look ey remember without looking) and gives the gin with the Fact Family of 2, 8 and 10.	
Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 8 and 10. Math Vocabulary Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days. It is important to review academic math vocabulary often throughout the day. Word for Today: counting number Description: A number that you can use to count things. It does not include 0 since 0 means nothing. When possible, have students experience the word (in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word. When possible, have students acting out an equation). Vocabulary Notebook Sample: Numbers used to count things like 1, 2, 3, 4, and 5 Vocabulary Notebooks can be made from ½ of a composition book. New Word My Description It is important to review academic math vocabulary often throughout the day. New Word My Description Vocabulary Notebook Sample: Vocabulary often the voci the word. New Word My Description It is important to review academic math vocabulary often throughout the day.	Have students write the entire Fact Family of 2 + 8 = 10 8 + 2 = 10 10 - 2 = 8 10 - 8 = 2 Bring two students up to practice the converse	n the white board.	
Math VocabularyIt is important to review academic math vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.It is important to review academic math vocabulary often throughout the day.Word for Today: counting number Description: A number that you can use to count things. It does not include 0 since 0 means nothing. Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).Vocabulary Notebook Sample:My Description Numbers used to count things like 1, 2, 3, 4, and 5Vocabulary often throughout the day.	Try it again with several other pairs of studer Then have children find a partner and practic Remember that today they are only doing the	nts. the conversation. Do this at least 4 times. e Fact Family of 2, 8 and 10.	
Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days. Vocabulary Notebook. The Vocabulary section will follow this pattern. We will complete the vocabulary often throughout the day. Word for Today: counting number Description: A number that you can use to count things. It does not include 0 since 0 means nothing. When possible, have students experience the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebook Sample: My Description New Word My Description New Word My Description Numbers used to count things like 1, 2, 3, 4, and 5 Desconal Connection Drawing	Math V	Vocabulary	It is important to review
Word for Today: counting numbernotebook for each word.Description: A number that you can use to count things. It does not include 0 since 0 means nothing. Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.New word (Ex. 4 students creating a right angle, multiple students acting out an equation).Vocabulary Notebook Sample:My Description and 5Vocabulary Notebooks can be made from ½ of a composition book.DescraptionNumbers used to count things like 1, 2, 3, 4, and 5It is important to review academic math vocabulary often throughout the day.	Each lesson will also have a vocabulary word may be reviewed more than one time. Youth Academic Vocabulary Notebook. The Vocab practice working on this for the next 11 days.	a that is appropriate for the grade level. The word in need to complete the vocabulary entry in an oulary section will follow this pattern. We will	vocabulary often throughout the day. Complete the Vocabulary
Description: A number that you can use to count things. It does not include 0 since 0 means nothing. When possible, have students experience the word in a sentence 0 means tudents experience the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebook Sample: New Word My Description New Word Numbers used to count things like 1, 2, 3, 4, and 5 It is important to review academic math vocabulary often throughout the day.	Word for Today: counting number		notebook for each word.
Vocabulary Notebook Sample: My Description Vocabulary Notebooks New Word My Description Counting number Numbers used to count things like 1, 2, 3, 4, and 5 Vocabulary Notebooks Dersonal Connection Drawing Drawing Drawing	Description: A number that you can use to count things. It does not include 0 since 0 means nothing. Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.		vvnen possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).
New Word My Description Counting number Numbers used to count things like 1, 2, 3, 4, and 5 Dersonal Connection Drawing	Vocabulary Notebook Sample:		Vocabulary Notebooks
Counting number Numbers used to count things like 1, 2, 3, 4, and 5 It is important to review academic math vocabulary often throughout the day.	New Word	My Description	can be made from ½ of a composition book.
Personal Connection Drawing throughout the day.	Counting number	Numbers used to count things like 1, 2, 3, 4, and 5	It is important to review academic math vocabulary often
Drawing	Personal Connection	Drawing	throughout the day.



In counting numbers, I am 6 years old.	1, 2, 3, 4, 5	
Math Each day students will have the opportunity to they need to work on. For the next several da different games. Here is how to introduce gan practice different games and activities.	Activity o play different games to practice the skills that ays you will want to help children practice mes to them and then an opportunity for them to	
Studer Step 1: Basic Information - Tell the students the name of the game. - Tell them the skill that they will be practice - Tell them the materials they will need to - Tell them how many people may play the - Tell them if the game is cooperative (all score) - Tell them how they will know that the game - Tell them how they will know that the game - Tell them how they will know that the game - Tell them how they will know that the game - Remind them of how to choose who will - Remind them at the end of the game that	nt Practice cing. play the game. e game at one time. students working together to defeat the game) or at the other players). me is over. be first. t they will need to do to clean-up.	
 Step 2: Demonstration Talk the students through the game. Give the rules (it is best if they can see the Give a demonstration or a "for example" Check for understanding by asking stude from what they observed. 	hese). ents to tell another student "how" to play the game	
 Step 3: Model Ask for 2-3 student volunteers to play a "see the game played from beginning to e Ask other students to make a circle aroun played. Go through the game step by step having Ask players to explain what they were th Ask onlookers to make observations or a After playing the game for several minute Replay the game with the new volunteers the players are stuck or playing the game Ask players to explain what they were th Ask players to explain what they were the players are stuck or playing the game Ask players to explain what they were the players to explain what they were the players are stuck or playing the game Ask players to explain what they were the players to e	"teaching game" so the remainder of the class can end. Ind the volunteers so they can see how the game is g the volunteers actually make the plays. inking when they made a particular move. ask questions. es, praise the first volunteers and ask for 2-3 more. s, providing less direction but being very responsive if e incorrectly. inking when they made a particular move. ask questions. ents to tell another student "how" to play the game	



Step 4:	Open Play	
-	Divide students into small groups (you might want to put a "volunteer" who played the game in	
	each of these small groups)	
-	Have the students play a practice game (no winners or losers) Note: If you are playing with	
	cards you might want to have the students display their hand of cards during Open Play.	
-	Check for understanding by asking students to tell another student "how" to play the game	
	from what they experienced.	
Note: 1	This is the last "practice" for the game. The majority of students will have a full understanding of	
the yan	e by this point. There will be only minor tweaks and adjustments that heed to be made.	
Step 5	Play	
	Have students play the game '	
_	Circulate and answer questions as needed	
_	Debrief the game at the end asking students:	
	What skill did you practice?	
	• What did you learn?	
	• What about the game was enjoyable? What makes you say that?	
	• How would you have taught the game differently?	
	Come for the Day	
	Game for the Day	Focus on naving young
		neonle "compete" in nairs
One M	ore	people "compete" in pairs or small groups. Once a
One M	ore	people "compete" in pairs or small groups. Once a game is mastered you
One Me Materia	ore als: Deck of Cards (remove face cards and jokers)	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When
One Mo Materia Players	als: Deck of Cards (remove face cards and jokers) s: 2-4	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete"
One Me Materia Players Purpos	als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is 1	als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number I more. Note: 10 can only be an answer card.	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is	als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number I more. Note: 10 can only be an answer card.	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
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One Materia Players Purpos that is 1 Direction 1.	als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. ons: Shuffle the cards.	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is 1 Direction 1. 2.	als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. ons: Shuffle the cards. Deal 5 cards to each player.	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is Direction 1. 2. 3.	 beck of Cards (remove face cards and jokers) c. 2-4 be of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. beas: buffle the cards. Deal 5 cards to each player. Player 1 asks Player 2 (3 or 4) for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2, he/she would ask for a 3. 	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is 7 Direction 1. 2. 3. 4.	 bere als: Deck of Cards (remove face cards and jokers) s: 2-4 be of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. besic besic cons: Shuffle the cards. Deal 5 cards to each player. Player 1 asks Player 2 (3 or 4) for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2, he/she would ask for a 3. If Player 2 has the card asked for, he/she gives it to Player 1. Player 1 then lays down his/her card and says, " (the card asked for) is one more than (the card Player 1 started with." Example: "3 is one more than 2." 	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is 7 Direction 1. 2. 3. 4. 5.	 bre als: Deck of Cards (remove face cards and jokers) 5: 2-4 be of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. bons: Shuffle the cards. Deal 5 cards to each player. Player 1 asks Player 2 (3 or 4) for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2, he/she would ask for a 3. If Player 2 has the card asked for, he/she gives it to Player 1. Player 1 then lays down his/her card and says, " (the card asked for) is one more than (the card Player 1 started with." Example: "3 is one more than 2." If Player 2 does not have the card asked for, he/she says, "Draw A Card", and Player 1 draws a card and adds to his/her hand. 	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is 1 Direction 1. 2. 3. 4. 5. 6.	 beck of Cards (remove face cards and jokers) s: 2-4 be of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. bears bears bears bears bears cards to each player. Player 1 asks Player 2 (3 or 4) for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2, he/she would ask for a 3. If Player 2 has the card asked for, he/she gives it to Player 1. Player 1 then lays down his/her card and says, " (the card asked for) is one more than (the card Player 1 started with." Example: "3 is one more than 2." If Player 2 does not have the card asked for, he/she says, "Draw A Card", and Player 1 draws a card and adds to his/her hand. Player 2 then repeats the procedure. 	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is Direction 1. 2. 3. 4. 5. 6. 7	 ber ber ber ber ber ber ber ber ber ber	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Closing

Review

Say:

Please recap what we did today.

• Did we achieve our objectives?

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" student getting ready to do this activity?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	1st Grade
Lesson Title:	Patterns Patterns
Focus:	Learning Each Math Lesson Segment

Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1. White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

· · ·	
Problem of the Day In this segment you will have a problem to work through with the students. You will want to	*Activity → Teachable Moment(s) <i>throughout</i>
draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.	During the lesson check in with students
many pennies do you have altogether?	repeatedly.
Math Facts	happening and what they
The Fact Practice activity will be the same every day for 1st graders and Kindergartners. You	are thinking.
may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.	Take advantage of any teachable moments.
Fact Practice	Stop the class and focus on a student's key
KindergartenCounting	learning or
During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from	understanding. Ask open-ended questions to determine what the rest of the group is thinking.
11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.	When possible, engage students in a "teach to learn" opportunity and
For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.	have the student become the teacher.



First Grade—Fact Families (They will have Fact Practice for 1 st grade is looking at numbe and subtraction. The key is for children to lear another in adding and subtracting. Fact practic Children will look at the math family. (We will They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 way "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and You should have them practice this conversati students every day. On the 5 th day, you will ut the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begin Have students write the entire Fact Family on 2 + 8 = 10 8 + 2 = 10 10 - 2 = 8		
10 - 8 = 2 Bring two students up to practice the conversa Try it again with several other pairs of students Then have children find a partner and practice Performer that today they are only doing the		
Keniember that today they are only doing the	It is important to review	
Math Vocabulary Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will		academic math vocabulary often throughout the day.
practice working on this for the next 11 days.	5	Complete the Vocabulary
Word for Today: pattern		notebook for each word.
Description: A group that is organized in such a way that you know what comes next. Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.		When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting
Vocabulary Notebook Sample:	out an equation).	
New Word pattern	My Description An order of different shapes or number sequences	Vocabulary Notebooks can be made from ½ of a composition book. It is important to review academic math
Personal Connection	Drawing	vocabulary often throughout the day.



What is the pattern on the wallpaper?	₩₩₽₽₩₩₽₽₽₩₩	
Math Each day students will have the opportunity to they need to work on. For the next several da different games. Here is how to introduce gan practice different games and activities.		
Step 1: Basic Information - Tell the students the name of the game. - Tell them the skill that they will be practic - Tell them the materials they will need to p - Tell them how many people may play the - Tell them if the game is cooperative (all s competitive (each student hopes to defeate) - Tell them how they will know that the game - Tell them of how to choose who will the material the end of the game that		
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Step 4:	Open Play	
-	Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)	
-	Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play. Check for understanding by asking students to tell another student "how" to play the game from what they experienced.	
Note: 1 the gam	This is the last "practice" for the game. The majority of students will have a full understanding of the by this point. There will be only minor tweaks and adjustments that need to be made.	
Step 5: - - -	Play Have students play the game.' Circulate and answer questions as needed. Debrief the game at the end asking students:	
	Game for the Day	Focus on having young
One M	ore	people "compete" in pairs or small groups. Once a
One Materia Materia Players Purpos that is 7	 bre als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. 	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is	als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number I more. Note: 10 can only be an answer card. ons:	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is Directi 1.	als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number i more. Note: 10 can only be an answer card. ons: Shuffle the cards.	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is 7 Directi 1. 2.	als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number I more. Note: 10 can only be an answer card. ons: Shuffle the cards. Deal 5 cards to each player.	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is 7 Directi 1. 2. 3.	 beck of Cards (remove face cards and jokers) c. 2-4 c. of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. ons: Shuffle the cards. Deal 5 cards to each player. Player 1 asks Player 2 (3 or 4) for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2, he/she would ask for a 3. 	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is 7 Directi 1. 2. 3. 4.	 bere als: Deck of Cards (remove face cards and jokers) 5: 2-4 5: 2-4 5: 6 of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. ons: Shuffle the cards. Deal 5 cards to each player. Player 1 asks Player 2 (3 or 4) for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2, he/she would ask for a 3. If Player 2 has the card asked for, he/she gives it to Player 1. Player 1 then lays down his/her card and says, " (the card asked for) is one more than (the card Player 1 started with." Example: "3 is one more than 2." 	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
One Materia Players Purpos that is 7 Directi 1. 2. 3. 4. 5.	 bre als: Deck of Cards (remove face cards and jokers) s: 2-4 se of the game: Practice recognizing the numbers between 1 and 10 and the number 1 more. Note: 10 can only be an answer card. ons: Shuffle the cards. Deal 5 cards to each player. Player 1 asks Player 2 (3 or 4) for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2, he/she would ask for a 3. If Player 2 has the card asked for, he/she gives it to Player 1. Player 1 then lays down his/her card and says, " (the card asked for) is one more than (the card Player 1 started with." Example: "3 is one more than 2." If Player 2 does not have the card asked for, he/she says, "Draw A Card", and Player 1 draws a card and adds to his/her hand. 	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
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Closing

Review

Say:

Please recap what we did today.

• Did we achieve our objectives?

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" student getting ready to do this activity?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	1 st Grade
Lesson Title:	Memory Match #1
Focus:	Learning Each Math Lesson Segment

Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1. One deck for every two children.

White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.

What is a pattern that you could make with 8 circles and 4 triangles?

Math Facts

The Fact Practice activity will be the same every day for 1st graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

Fact Practice

Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

First Grade—Fact Families (They will have different fact families each day)

*Activity \rightarrow Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking.

Take advantage of any teachable moments.

Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



Fact Practice for 1 st grade is looking at number	families, so you are looking at both addition and	
subtraction. The key is for children to learn that	numbers have a relationship with one another	
Children will look at the math family. (We will be		
They will write the problem in four ways		
1 + 2 = 3		
2 + 1 = 3		
3 - 2 = 1		
3 – 1 = 2		
After they have written the problem in all 4 ways "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	s they will find a partner and say,	
The other student will respond with "Yes, and si You should have them practice this conversation	nce that is true, $3 - 1 = 2$, and $3 - 2 = 1^{"}$. n (exactly as it is written) with 3-5 other students	
every day. On the 5 th day, you will utilize all 4 p	roblems from the days before, and the	
conversation will follow the pattern, but the second	ond responder will need to quickly look through	
his/her cards (of course we hope they remember	er without looking) and gives the correct	
response.		
Today you will introduce this activity and begin	with the Fact Family of 2, 8 and 10.	
Have students write the entire Fact Family on th	e white board.	
2 + 8 = 10		
8 + 2 = 10		
10 - 2 = 8 10 9 - 2		
10 - 0 = 2	on	
Try it again with several other pairs of students		
Then have children find a partner and practice t	he conversation. Do this at least 4 times.	
Remember that today they are only doing the Fa	act Family of 2, 8 and 10.	
Math Vo	cabulary	It is important to review
Fach lesson will also have a vocabulary word	that is appropriate for the grade level. The	academic math vocabulary
word may be reviewed more than one time	(outh need to complete the vocabulary entry	often throughout the day.
in an Academic Vocabulary Notebook The V	ocabulary section will follow this pattern. We	Complete the Vocabulary
will practice working on this for the next 11 days		notebook for each word.
Word for Today: circle		When possible, have
Description: A shape that is flat and is a con	tinuous curve until it joins itself.	Students experience the word
Complete the journal entry in your Vocabulary	Notebook. In space 1, write the word. In	(EX. 4 Sludenis creating a right angle, multiple students
space 2, explain the word in your own words.	In space 3 use the word in a sentence. In	acting out an equation)
space 4 demonstrate your understanding of th	ne word by drawing a picture of the word.	Vocabulary Notabooks can
		he made from ½ of a
Vocabulary Notebook Sample		composition book.
New Word	My Description	It is important to review
		academic math vocabulary
circle	A flat, round object, made from one	often throughout the day.
	Complete the Vocabulary	
Personal Connection	notebook for each word.	
	awing	When nossible have
I have a cleak charad like a single in my	students experience the word	
room	(Ex. 4 students creating a	
	right angle, multiple students	
	acting out an equation).	





- - Note: 1	Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play. Check for understanding by asking students to tell another student "how" to play the game from what they experienced.	
underst need to	anding of the game by this point. There will be only minor tweaks and adjustments that be made.	
Step 5: - -	 Play Have students play the game.' Circulate and answer questions as needed. Debrief the game at the end asking students: What skill did you practice? What did you learn? What about the game was enjoyable? What makes you say that? How would you have taught the game differently? 	
Memor Materia Players Purpos Directio	Game for the Day y Match Is: Deck of Cards (remove face cards and jokers) s: 2 e of the game: Practice recognizing the numbers between 1 and 10. ons:	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Memor Materia Players Purpos Directio 1.	Game for the Day y Match Ils: Deck of Cards (remove face cards and jokers) : 2 e of the game: Practice recognizing the numbers between 1 and 10. ons: Shuffle the cards.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Memor Materia Players Purpos Directio 1. 2.	Game for the Day y Match Ils: Deck of Cards (remove face cards and jokers) : 2 e of the game: Practice recognizing the numbers between 1 and 10. ons: Shuffle the cards. Make a 4 x 4 grid, placing cards face down. (4 columns, 4 rows)	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Memor Materia Players Purpos Directio 1. 2. 3.	Game for the Day y Match Ils: Deck of Cards (remove face cards and jokers) s: 2 e of the game: Practice recognizing the numbers between 1 and 10. ons: Shuffle the cards. Make a 4 x 4 grid, placing cards face down. (4 columns, 4 rows) Place the remainder of the cards to the right of the grid.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Memor Materia Players Purpos Directio 1. 2. 3. 4.	Game for the Day y Match Ils: Deck of Cards (remove face cards and jokers) :: 2 e of the game: Practice recognizing the numbers between 1 and 10. ons: Shuffle the cards. Make a 4 x 4 grid, placing cards face down. (4 columns, 4 rows) Place the remainder of the cards to the right of the grid. Player 1 turns over two cards. If they match (have the same numeric value) then the player takes both of the cards and places them face down by them.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Memor Materia Players Purpos Directio 1. 2. 3. 4. 5.	Game for the Day y Match Ils: Deck of Cards (remove face cards and jokers) s: 2 e of the game: Practice recognizing the numbers between 1 and 10. ons: Shuffle the cards. Make a 4 x 4 grid, placing cards face down. (4 columns, 4 rows) Place the remainder of the cards to the right of the grid. Player 1 turns over two cards. If they match (have the same numeric value) then the player 1 then replaces the 2 cards with ones from the deck.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Memor Materia Players Purpos Directio 1. 2. 3. 4. 5. 6.	Game for the Day y Match Ils: Deck of Cards (remove face cards and jokers) :: 2 e of the game: Practice recognizing the numbers between 1 and 10. Dons: Shuffle the cards. Make a 4 x 4 grid, placing cards face down. (4 columns, 4 rows) Place the remainder of the cards to the right of the grid. Player 1 turns over two cards. If they match (have the same numeric value) then the player takes both of the cards and places them face down by them. Player 1 then replaces the 2 cards with ones from the deck. If Player 1 matches, then he/she takes a second turn. If Player 1 does not match, he/she turns the cards back over and play continues with Player 2.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Memor Materia Players Purpos Directio 1. 2. 3. 4. 5. 6. 7.	Game for the Day y Match ils: Deck of Cards (remove face cards and jokers) :: 2 e of the game: Practice recognizing the numbers between 1 and 10. Dns: Shuffle the cards. Make a 4 x 4 grid, placing cards face down. (4 columns, 4 rows) Place the remainder of the cards to the right of the grid. Player 1 turns over two cards. If they match (have the same numeric value) then the player takes both of the cards and places them face down by them. Player 1 then replaces the 2 cards with ones from the deck. If Player 1 matches, then he/she takes a second turn. If Player 1 does not match, he/she turns the cards back over and play continues with Player 2. Play continues until all of the cards are matched.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Closing

Review

Say:

• Please recap what we did today.

• Did we achieve our objectives?

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" student getting ready to do this activity?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	1 st Grade
Lesson Title:	Memory Match #2
Focus:	Learning Each Math Lesson Segment

Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1. One deck for every two children.

White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.

You walk 10 steps and stop. Then you walk 10 more steps. How many steps have you walked altogether?

Math Facts

The Fact Practice activity will be the same every day for 1st graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

Fact Practice

Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

*Activity → Teachable Moment(s) *throughout* During the lesson check in with students repeatedly.

Check in about what is happening and what they are thinking.

Take advantage of any teachable moments.

Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



First Grade—Fact Families (They will have o	lifferent fact families each day)	
Fact Practice for 1 st grade is looking at number	families, so you are looking at both addition and	
subtraction. The key is for children to learn that		
in adding and subtracting. Fact practice will follo		
Children will look at the math family (We will be	pain with 1 more then 2 more etc.)	
They will write the problem in four ways		
1 + 2 = 2		
1 + 2 = 3		
2 + 1 = 3		
3 - 2 = 1		
3 - 1 = 2		
After they have written the problem in all 4 ways	s they will find a partner and say,	
"If 1 + 2 = 3, then 2 + 1 =3".		
The other student will respond with "Yes, and si	nce that is true, $3 - 1 = 2$, and $3 - 2 = 1''$.	
You should have them practice this conversation	n (exactly as it is written) with 3-5 other students	
every day. On the 5th day, you will utilize all 4 p	roblems from the days before, and the	
conversation will follow the pattern, but the second	and responder will need to quickly look through	
his/her cards (of course we hope they remember	r without looking) and gives the correct	
response.	5, 5	
Today you will introduce this activity and begin	with the Eact Family of 2, 8 and 10	
Have students write the entire Eact Family on the	e white hoard	
2 + 8 = 10	e white board.	
2 + 0 - 10 9 + 2 - 10		
0 + 2 = 10		
10 - 2 = 8		
10 - 8 = 2		
Bring two students up to practice the conversati	on.	
Try it again with several other pairs of students.		
Then have children find a partner and practice t	he conversation. Do this at least 4 times.	
Remember that today they are only doing the Fa	act Family of 2, 8 and 10.	
Math Vo	cabulary	It is important to review
Each lesson will also have a vocabulary word	that is appropriate for the grade level. The	academic math vocabulary
word may be reviewed more than one time.	(auth need to complete the vecebulery entry	often throughout the day.
word may be reviewed more than one time. Y		Complete the Vecabulary
In an Academic Vocabulary Notebook. The V	ocadulary section will follow this pattern. we	complete the vocabulary
will practice working on this for the next 11 da	ys.	
Word for Today: square		When possible, have
Description: A shape that has four sides that	t are all equal in length.	students experience the word
Complete the journal entry in your Vocabulary	Notebook In space 1 write the word In	(Ex. 4 students creating a
space 2 explain the word in your own words	In space 3 use the word in a sentence. In	right angle, multiple students
space 2, explain the word in your own words.	a word by drawing a picture of the word	acting out an equation).
space 4 demonstrate your understanding of th	ie word by drawing a picture of the word.	Vocabulary Notebooks can
	be made from ½ of a	
vocadulary inotebook Sample	composition book	
New Word	My Description	It is important to roviow
		It is important to review
Square	A four sided figure with all sides equal	academic main vocabulary
· ·		onen infougnout the day.
		Complete the Vocabulary
Personal Connection Drawing		notebook for each word.
		When possible, have
		students experience the word
Thave a square clock in my room.		(Fx_4 students creating a
		right angle multiple students
		ngn angie, manipie statems



	acting out an equation).
Math Activity Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.	
Student Practice	
 Step 1: Basic Information Tell the students the name of the game. Tell them the skill that they will be practicing. Tell them the materials they will need to play the game. Tell them how many people may play the game at one time. Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players). Tell them how they will know that the game is over. Remind them of how to choose who will be first. Remind them at the end of the game that they will need to do to clean-up. 	
Step 2: Demonstration	
 Give the rules (it is best if they can see these). 	
 Give a demonstration or a "for example" Check for understanding by asking students to tell another student "how" to play the game from what they observed. 	
Step 3: Model	
- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.	
- Ask other students to make a circle around the volunteers so they can see how the game is played.	
- Go through the game step by step having the volunteers actually make the plays.	
 Ask players to explain what they were thinking when they made a particular move. Ask onlookers to make observations or ask questions 	
 After playing the game for several minutes, praise the first volunteers and ask for 2-3 	
more.	
 Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly. 	
- Ask players to explain what they were thinking when they made a particular move.	
 Ask onlookers to make observations or ask questions. 	
- Check for understanding by asking students to tell another student "how" to play the	
Step 4: Open Play	
- Divide students into small groups (you might want to put a "volunteer" who played the	



-	game in each of these small groups) Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards	
	during Open Play.	
-	Check for understanding by asking students to tell another student "how" to play the game from what they experienced	
	game nom what they experienced.	
Note:	his is the last "practice" for the game. The majority of students will have a full and ing of the game by this point. There will be only minor tweaks and adjustments that be made.	
Step 5:	Play	
-	Have students play the game.'	
-	Circulate and answer questions as needed.	
-	Debrief the game at the end asking students:	
	 What skill did you practice? What did you learn? 	
	• What about the game was enjoyable? What makes you say that?	
	 How would you have taught the game differently? 	
	Game for the Day	Focus on having young
Momor	w Match	people "compete" in pairs or
Materia	Is: Deck of Cards (remove face cards and jokers)	is mastered you can utilize it
Players	:: 2	in the "When Homework Is
Purpos Directi	e of the game: Practice recognizing the numbers between 1 and 10.	Complete" center.
1.	Shuffle the cards.	
2.	Make a 4 x 4 grid, placing cards face down. (4 columns, 4 rows)	
3.	Place the remainder of the cards to the right of the grid.	
4.	Player 1 turns over two cards. If they match (have the same numeric value) then the player takes both of the cards and places them face down by them.	
5.	Player 1 then replaces the 2 cards with ones from the deck.	
6.	If Player 1 matches, then he/she takes a second turn. If Player 1 does not match, he/she turns the cards back over and play continues with Player 2.	
7.	Play continues until all of the cards are matched.	
Q	MAP and the last of the last of the second and the second of the second of the second	



Closing

Review

Say:

• Please recap what we did today.

• Did we achieve our objectives?

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" student getting ready to do this activity?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	1 st Grade
Lesson Title:	Duel
Focus:	Learning Each Math Lesson Segment

Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1. One deck for every two children.

White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.

If you have 5 dimes and you spend 3 of them, how many do you have left?

Math Facts

The Fact Practice activity will be the same every day for 1st graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

Fact Practice

Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

First Grade—Fact Families (They will have different fact families each day) Fact Practice for 1st grade is looking at number families, so you are looking at both addition and

*Activity -> Teachable
Moment(s) throughout
During the lesson check in

with students repeatedly. Check in about what is happening and what they are thinking.

Take advantage of any teachable moments.

Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



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Children will look at the math family. (We will be		
They will write the problem in four ways.	· · · · · · · · · · · · · · · · · · ·	
1 + 2 = 3		
2 + 1 = 3		
3 – 2 = 1		
3 – 1 = 2		
After they have written the problem in all 4 ways	s they will find a partner and say,	
"If 1 + 2 = 3, then 2 + 1 =3".		
The other student will respond with "Yes, and si	nce that is true, $3 - 1 = 2$, and $3 - 2 = 1^{"}$.	
You should have them practice this conversation	n (exactly as it is written) with 3-5 other students	
every day. On the 5 th day, you will utilize all 4 p	roblems from the days before, and the	
conversation will follow the pattern, but the seco	and responder will need to quickly look through	
nis/ner cards (of course we nope they remembe	r without looking) and gives the correct	
response.	with the Feet Femily of 2, 9 and 10	
Have students write the entire East Eamly on the	with the Fact Family of 2, 8 and 10.	
2 + 8 = 10		
2 + 0 = 10 8 + 2 = 10		
10 - 2 - 8		
10 - 8 = 2		
Bring two students up to practice the conversati	on.	
Try it again with several other pairs of students.		
Then have children find a partner and practice the	he conversation. Do this at least 4 times.	
Remember that today they are only doing the Fa	act Family of 2, 8 and 10.	
	×	
Math Vo	cabularv	It is important to review
Math Vo Fach lesson will also have a vocabulary word th	cabulary	It is important to review academic math vocabulary
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Math Activity

Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.

Student Practice

Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.

Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
- Give a demonstration or a "for example"
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.

Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.

Step 4: Open Play

- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) Note: If you are





 playing with cards you might want to have the students display their hand of cards during Open Play. Check for understanding by asking students to tell another student "how" to play the game from what they experienced. 	
Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.	
 Step 5: Play Have students play the game.' Circulate and answer questions as needed. Debrief the game at the end asking students: What skill did you practice? What did you learn? What about the game was enjoyable? What makes you say that? 	
 How would you have taught the game differently? 	
 How would you have taught the game differently? Game for the Day Duel 	Focus on having young people "compete" in pairs or small groups. Once a game
 How would you have taught the game differently? Game for the Day Duel Players: 2 	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 How would you have taught the game differently? Game for the Day Duel Players: 2 Directions: 	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 o How would you have taught the game differently? Game for the Day Duel Players: 2 Directions: Shuffle the cards and deal them out. 	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 o How would you have taught the game differently? Game for the Day Duel Players: 2 Directions: Shuffle the cards and deal them out. Each player puts their cards in a pile facing down. 	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 o How would you have taught the game differently? Game for the Day Duel Players: 2 Directions: Shuffle the cards and deal them out. Each player puts their cards in a pile facing down. Together players flip the top card over and place it in the center. 	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 How would you have taught the game differently? Game for the Day Duel Players: 2 Directions: Shuffle the cards and deal them out. Each player puts their cards in a pile facing down. Together players flip the top card over and place it in the center. The first player to say the names of the numbers on both cards, wins the cards. 	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 o How would you have taught the game differently? Game for the Day Duel Players: 2 Directions: Shuffle the cards and deal them out. Each player puts their cards in a pile facing down. Together players flip the top card over and place it in the center. The first player to say the names of the numbers on both cards, wins the cards. If a player calls an incorrect answer the cards are returned to the bottom of the pile. 	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

		Closing	
		Review	
Say:			
•	Please recap what we did today. Did we achieve our objectives?		



Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" student getting ready to do this activity?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	1 st Grade
Lesson Title:	Just the Facts #1
Focus:	Learning Each Math Lesson Segment

Materials:

Dominoes (attached)

White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.

If you have 5 marbles and your friend has 3 marbles, how many do you have altogether?

Math Facts

The Fact Practice activity will be the same every day for 1st graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

Fact Practice

Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

Activity - Teachable
Moment(s) throughout
During the lesson check in with
students repeatedly.
Check in about what is
happening and what they are
thinking.
Take advantage of any

teachable moments.

Stop the class and focus on a student's key learning or understanding. Ask open-ended questions to determine what the rest of the group is thinking.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.


First Grade—Fact Families (They will have Fact Practice for 1 st grade is looking at num addition and subtraction. The key is for characterine very day. Children will look at the math family. (We will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 2 - 1 = 2	ave different fact families each day) nber families, so you are looking at both ildren to learn that numbers have a d subtracting. Fact practice will follow this will begin with 1 more, then 2 more, etc.)	
After they have written the problem in all 4 "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, a	ways they will find a partner and say, nd since that is true, $3 - 1 = 2$, and $3 - 2 =$	
1". You should have them practice this conversion students every day. On the 5 th day, you will and the conversation will follow the pattern quickly look through his/her cards (of course and gives the correct response. Today you will introduce this activity and b Have students write the entire Fact Family 2 + 8 = 10 8 + 2 = 10 10 - 2 = 8 10 - 8 = 2 Bring two students up to practice the conversion of the students of the students of the conversion of the students of the conversion of the students of the students of the conversion of the students of the students of the conversion of the students of the s	sation (exactly as it is written) with 3-5 other Il utilize all 4 problems from the days before, , but the second responder will need to se we hope they remember without looking) egin with the Fact Family of 2, 8 and 10. on the white board.	
Try it again with several other pairs of stud Then have children find a partner and prac times. Remember that today they are only	ents. tice the conversation. Do this at least 4 doing the Fact Family of 2, 8 and 10.	
Math Ve	ocabulary	It is important to review
Each lesson will also have a vocabulary we The word may be reviewed more than one vocabulary entry in an Academic Vocabula follow this pattern. We will practice working	academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.	
Word for Today: operations		When possible, have students
Description: The word operation refers to common are addition, subtraction, multiplic these symbols: +, -, X, and ÷. Complete the journal entry in your Vocabul space 2, explain the word in your own word In space 4 demonstrate your understanding word.	experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.	
	It is important to review	
Vocabulary Notebook Sample: New Word	My Description	academic math vocabulary often throughout the day. Complete the Vocabulary



operations	There 4 basic operations: addition, subtraction, multiplication and division	notebook for each word. When possible, have students experience the word (Ex. 4
Personal Connection How many of the operations can you complete?	Drawing	students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Math Each day students will have the opportunit that they need to work on. For the next se practice different games. Here is how to ir opportunity for them to practice different ga	Activity y to play different games to practice the skills veral days you will want to help children stroduce games to them and then an ames and activities.	
Studen Step 1: Basic Information - Tell the students the name of the gan - Tell them the skill that they will be pra - Tell them the materials they will need - Tell them how many people may play - Tell them if the game is cooperative (or competitive (each student hopes to - Tell them how they will know that the - Remind them of how to choose who w - Remind them at the end of the game Step 2: Demonstration	t Practice ne. acticing. to play the game. the game at one time. all students working together to defeat the game) o defeat the other players). game is over. vill be first. that they will need to do to clean-up.	
 Talk the students through the game. Give the rules (it is best if they can see Give a demonstration or a "for examp Check for understanding by asking st game from what they observed. 	te these). le" udents to tell another student "how" to play the	
 Step 3: Model Ask for 2-3 student volunteers to play can see the game played from beginn Ask other students to make a circle a game is played. Go through the game step by step ha Ask players to explain what they were Ask onlookers to make observations of After playing the game for several min more. Replay the game with the new volunter responsive if the players are stuck or 	a "teaching game" so the remainder of the class ning to end. round the volunteers so they can see how the ving the volunteers actually make the plays. e thinking when they made a particular move. or ask questions. nutes, praise the first volunteers and ask for 2-3 eers, providing less direction but being very playing the game incorrectly.	



- - Step 4: -	Ask players to explain what they were thinking when they made a particular move. Ask onlookers to make observations or ask questions. Check for understanding by asking students to tell another student "how" to play the game from what they observed. Open Play Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups) Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play. Check for understanding by asking students to tell another student "how" to play the game from what they experienced.	
Note: T understa need to	his is the last "practice" for the game. The majority of students will have a full anding of the game by this point. There will be only minor tweaks and adjustments that be made.	
Step 5: - -	Play Have students play the game.' Circulate and answer questions as needed. Debrief the game at the end asking students: What skill did you practice? What skill did you practice? What did you learn? What about the game was enjoyable? What makes you say that? How would you have taught the game differently?	
Just the Players Directio	Game for the Day Facts 2-3 ns:	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
ן. כ	After deciding who will go first. Player 1 draws a domine, turns it face up and places it	
Ζ.	down in front of him/her.	
3.	Kindergarten: Play 1 counts the pips on the dominoes and tells how many are on the domino 1^{st} Grade: Player 1 totals the pips on the domino by saying (e.g. $2 + 4 = 6$). If the answer is correct, then player keeps the domino and play moves on to player 2.	
4.	If player does not say the correct total or sum, then the domino is returned to the pile	
5.	Play continues until all dominoes are taken.	



Closing

Review

Say:

Please recap what we did today.

• Did we achieve our objectives?

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" student getting ready to do this activity?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



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Component	Math
Grade Level:	1 st Grade
Lesson Title:	Just the Facts #2
Focus:	Learning Each Math Lesson Segment

Materials:

Dominoes (attached)

White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

Problem of the Day In this segment you will have a problem to work through with the students. You will want	*Activity → Teachable Moment(s) <i>throughout</i>
to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.	During the lesson check in with students repeatedly.
If you have 2 chocolate chip cookies and 3 Oreos, how many cookies do you have altogether?	Check in about what is happening and what they are
Math Facts	thinking.
The Fact Practice activity will be the same every day for 1 st graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts	Take advantage of any teachable moments.
that are appropriate for the grade level students are in.	Stop the class and focus on a student's key learning or
Fact Practice	understanding. Ask open-
KindergartenCounting	ended questions to determine
During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To belo them do that	what the rest of the group is thinking.
you will create number book. After working with the Kindergartners, if they can verbally	When possible, engage students in a "teach to learn"
to 20, help them to learn those numbers by helping them with this book. You can always	opportunity and have the student become the teacher.
do more than one page of and single number if you need more time to reinforce counting.	
For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.	



Fact Practice for 1 st grade is looking at numb addition and subtraction. The key is for child with one another in adding and subtracting		
dav	r det produce will follow this pattern every	
Children will look at the math family (We wil	Lheain with 1 more then 2 more etc.)	
They will write the problem in four ways		
1+2=3		
2 + 1 = 3		
3 – 2 = 1		
3 – 1 = 2		
After they have written the problem in all 4 wa	ays they will find a partner and say,	
"If 1 + 2 = 3, then 2 + 1 =3".		
The other student will respond with "Yes, and	d since that is true, $3 - 1 = 2$, and $3 - 2 = 1^{"}$.	
You should have them practice this conversa	ition (exactly as it is written) with 3-5 other	
students every day. On the 5 th day, you will	utilize all 4 problems from the days before,	
and the conversation will follow the pattern, b	but the second responder will need to quickly	
look through his/her cards (of course we hop	e they remember without looking) and gives	
the correct response.	in with the East Eamily of 2, 9 and 10	
Have students write the entire Eact Family or	JIII WILLI LITE FACL FAILING OF 2, 6 ALLO TO.	
$2 \pm 8 - 10$		
8 + 2 = 10		
10 - 2 = 8		
10 - 8 = 2		
Bring two students up to practice the convers	sation.	
Try it again with several other pairs of studen	its.	
Then have children find a partner and practic	e the conversation. Do this at least 4 times.	
B 1 1 1 1 1 1 1 1		
Remember that today they are only doing the	e Fact Fathily OFZ, o allu TU.	
Remember that today they are only doing the Math Vo	cabulary	It is important to review
Remember that today they are only doing the Math Vo Each lesson will also have a vocabulary word	cabulary that is appropriate for the grade level. The	It is important to review academic math vocabulary
Remember that today they are only doing the Math Vo Each lesson will also have a vocabulary word word may be reviewed more than one time.	cabulary d that is appropriate for the grade level. The Work with the children to create a	It is important to review academic math vocabulary often throughout the day.
Remember that today they are only doing the Math Vo Each lesson will also have a vocabulary word word may be reviewed more than one time. Vocabulary entry on paper as a class (as 1 st	cabulary d that is appropriate for the grade level. The Work with the children to create a grader mature they can do their own	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary
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Remember that today they are only doing the Math Vo Each lesson will also have a vocabulary word word may be reviewed more than one time. Vocabulary entry on paper as a class (as 1 st journals). The Vocabulary section will follow for the next 11 days.	cabulary d that is appropriate for the grade level. The Work with the children to create a grader mature they can do their own this pattern. We will practice working on this	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students
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	is about numbers and patterns	experience the word (Ex. 4 students creating a right
Personal Connection Math is one of my favorite subjects in school.	Drawing Math 24 Fractions Geometry 3x+4y=2x	angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Math A Each day students will have the opportunity t that they need to work on. For the next seve practice different games. Here is how to intro opportunity for them to practice different gam	Activity o play different games to practice the skills ral days you will want to help children oduce games to them and then an les and activities.	
Student Step 1: Basic Information - Tell the students the name of the game. - Tell them the skill that they will be praction - Tell them the materials they will need to - Tell them how many people may play the - Tell them if the game is cooperative (all competitive (each student hopes to defe - Tell them how they will know that the ga - Remind them of how to choose who will - Remind them at the end of the game that - Step 2: Demonstration - Talk the students through the game. - Give the rules (it is best if they can see - Give a demonstration or a "for example" - Check for understanding by asking students	Practice cing. play the game. e game at one time. students working together to defeat the game) or eat the other players). me is over. be first. at they will need to do to clean-up. these).	
 game from what they observed. Step 3: Model Ask for 2-3 student volunteers to play a can see the game played from beginnin Ask other students to make a circle arou game is played. Go through the game step by step havir Ask players to explain what they were th Ask onlookers to make observations or After playing the game for several minuter more. Replay the game with the new volunteer responsive if the players are stuck or play 	"teaching game" so the remainder of the class g to end. and the volunteers so they can see how the ng the volunteers actually make the plays. ninking when they made a particular move. ask questions. res, praise the first volunteers and ask for 2-3 rs, providing less direction but being very aying the game incorrectly.	



-	Ask onlookers to make observations or ask guestions.	
- Step 4:	Check for understanding by asking students to tell another student "how" to play the game from what they observed. Open Play	
-	Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups) Have the students play a practice game (no winners or losers) Note: If you are playing	
	with cards you might want to have the students display their hand of cards during Open Play.	
-	Check for understanding by asking students to tell another student "how" to play the game from what they experienced.	
Note: T understa need to	his is the last "practice" for the game. The majority of students will have a full anding of the game by this point. There will be only minor tweaks and adjustments that be made.	
Step 5:	Play	
-	Tave sluuenis play life game. Circulate and answer questions as needed	
_	Debrief the game at the end asking students:	
	• What skill did you practice?	
	• What did you learn?	
	• What about the game was enjoyable? What makes you say that?	
	 How would you have taught the game differently? 	
	Game for the Day	Focus on having young
luct the	Faste	people "compete" in pairs or
Players	· 2-3	small groups. Once a game is
i layers	. 2 5	the "When Homework Is
Directio	ns:	Complete" center.
1.	Dominoes are placed in the center of the table, face down.	
2.	After deciding who will go first, Player 1 draws a domino, turns it face up and places it down in front of him/her.	
3.	Kindergarten: Play 1 counts the pips on the dominoes and tells how many are on the domino 1^{st} Grade: Player 1 totals the pips on the domino by saying (e.g. $2 + 4 = 6$). If the answer is correct, then player keeps the domino and play moves on to player 2.	
4.	If player does not say the correct total or sum, then the domino is returned to the pile	
5.	Play continues until all dominoes are taken.	



Closing

Review

Say:

Please recap what we did today.

• Did we achieve our objectives?

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" student getting ready to do this activity?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



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Component	Math
Grade Level:	1 st Grade
Lesson Title:	Student Activity Choice #1
Focus:	Learning Each Math Lesson Segment

Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1. One deck for every two children.

White boards or paper and pencil

Opening

State the objective

Today we are going to practice the different aspects of the math lesson plan.

Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?

What are some of the math vocabulary words that you know?

What do you think is meant by "Problem of the Day"?

Content (the "Meat")

Problem of the Day	*Activity 🗲 Teachable
In this segment you will have a problem to work through with the students. You will want to	Moment(s) throughout
draw a picture of the problem so they can see that the words are connected to the numbers	During the lesson check in
which represent the story.	with students repeatedly.
If you have 9 apple pieces and you ear 5 of them, now many do you have left?	Check in about what is
Math Facts	happening and what they
The Fact Practice activity will be the same every day for 1 st graders and Kindergartners.	are thinking.
You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.	Take advantage of any teachable moments.
Fact Practice	Stop the class and focus on a student's key learning or
KindergartenCounting	understanding. Ask open-
During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do	ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have
more than one page of and single number if you need more time to reinforce counting.	the student become the
For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.	teacher.



First Grade—Fact Families (They will have different fact families each day) Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and			
the conversation will follow the pattern, bu through his/her cards (of course we hope to correct response. Today you will introduce this activity and b	t the second responder will need to quickly look they remember without looking) and gives the begin with the Fact Family of 2, 8 and 10.		
Have students write the entire Fact Family 2 + 8 = 10 8 + 2 = 10 10 - 2 = 8 10 - 8 = 2	Have students write the entire Fact Family on the white board. 2 + 8 = 10 8 + 2 = 10 10 - 2 = 8		
Bring two students up to practice the conv Try it again with several other pairs of stud Then have children find a partner and prac Remember that today they are only doing	Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 8 and 10.		
Math Each lesson will also have a vocabulary w word may be reviewed more than one time in an Academic Vocabulary Notebook. Th will practice working on this for the next 11	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.		
Word for Today: additionWhen possible, haveDescription: Combining two or more groups of things (usually representing by numerals)When possible, haveand finding a total.word (Ex. 4 studentsComplete the journal entry in your Vocabulary Notebook. In space 1, write the word. Inword (Ex. 4 studentsspace 2, explain the word in your own words. In space 3 use the word in a sentence. Inmultiple students actispace 4 demonstrate your understanding of the word by drawing a picture of the word.an equation).			
Vocabulary Notebook Sample:		Vocabulary Notebooks can be made from ½ of a composition book.	
addition	Combining the values of two or more things into a whole	It is important to review academic math vocabulary often throughout the day.	
Personal Connection Drawing		notebook for each word. When possible, have	



Do you know how to do addition problems?	- 7 + 3 = 10	students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Math Activ Each day students will have the opportunity to pla they need to work on. For the next several days y different games. Here is how to introduce games to practice different games and activities. Student Pra Step 1: Basic Information - Tell the students the name of the game. - Tell them the skill that they will be practicing	vity y different games to practice the skills that you will want to help children practice to them and then an opportunity for them ctice	
 Tell them the skill that they will be practicing. Tell them the materials they will need to play the game. Tell them how many people may play the game at one time. Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players). Tell them how they will know that the game is over. Remind them of how to choose who will be first. Remind them at the end of the game that they will need to do to clean-up. 		
 Step 2: Demonstration Talk the students through the game. Give the rules (it is best if they can see these Give a demonstration or a "for example" Check for understanding by asking students the from what they observed.). to tell another student "how" to play the game	
 Step 3: Model Ask for 2-3 student volunteers to play a "teac see the game played from beginning to end. Ask other students to make a circle around the is played. Go through the game step by step having the Ask players to explain what they were thinkin Ask onlookers to make observations or ask q After playing the game for several minutes, progresponsive if the players are stuck or playing Ask players to explain what they were thinkin 	hing game" so the remainder of the class can ne volunteers so they can see how the game e volunteers actually make the plays. g when they made a particular move. uestions. raise the first volunteers and ask for 2-3 more. oviding less direction but being very the game incorrectly. g when they made a particular move. uestions.	
 Check for understanding by asking students in 	to tell another student "how" to play the game	



from what they observed.				
Step 4: Open Play				
- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)				
- Have the students play a practice game (no winners or losers) Note: If you are playing				
with cards you might want to have the students display their hand of cards during Open				
Play.				
- Check for understanding by asking students to tell another student "how" to play the game				
from what they experienced.				
Note: This is the last "practice" for the game. The majority of students will have a full				
understanding of the game by this point. There will be only minor tweaks and adjustments that				
need to be made.				
Step 5: Play				
- Have students play the game.'				
- Circulate and answer questions as needed.				
- Debrief the game at the end asking students:				
 What skill did you practice? 				
• What did you learn?				
• What about the game was enjoyable? What makes you say that?				
 How would you have taught the game differently? 				
Game for the Day	Focus on having young			
Game for the Day	people "compete" in pairs or			
Children choose from the activities they have done over the past few days	small groups. Once a game			
Have children work in pairs and/or small groups is mastered you can utilize it in the "When Homework Is				
Games to Choose From	Complete" center.			
1. Count Down				
 Count Down One More 				
 Count Down One More Patterns 				
 Count Down One More Patterns Memory Match 				
 Count Down One More Patterns Memory Match Duel 				
 Count Down One More Patterns Memory Match Duel Just the Facts 				

		Closing	
		Review	
Say:			
•	Please recap what we did today. Did we achieve our objectives?		



Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" student getting ready to do this activity?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	Kindergarten
Lesson Title:	Student Activity Choice #2
Focus:	Review
Focus:	Review

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	page for the number book (This is the page for 1)
Socks	items that children can choose to show one (stickers, stamps, something flat
Glue sticks	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Count from 10-1 backwards Using your fingers show each of these numbers: 6, 3, 2, 8, 9, 7 Count from 1-10 forwards Using your hands, show a circle. Show a triangle. Show a square. Stretch the square into a rectangle What is the difference between a number and a letter?

Content (the "Meat")				
Problem of the Day Help the children figure out how to solve this problem by giving them several examples.			*Activity → Teachable Moment(s) <i>throughout</i>	
Then put this problem on the board and have them draw the answer that they select on the white board.			During the lesson check in with students repeatedly.	
Look at the graph below. Children had to pick a favorite color. There is one heart for each child's vote. Which color has the most hearts by it?			Check in about what is happening and what they are thinking.	
	red	•••	_	Take advantage of any
	green	••	_	teachable moments
	blue	****		
Fact Practice The Number Book During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create a number book. After working with the Kindergartners, if they can				stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.



verbally count to 10, then make the number book go to 10. If they struggle counting to 10, make the number book with 2 pages for each number 1-5. The Book	When possible, engage students in a "teach to learn" opportunity and have the
Make the cover and the back for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste. Once they have completed the book you will want to connect it with either staples or by punching a hole at the top and connecting the pages with a ring. You might want to consider making the cover out of colored card stock and then having the children decorate the front and back cover. If you pre-print the cover you can title it <u>My Counting Book</u> . Be sure that the child writes his/her name on the cover so you can send it home.	student become the teacher.
Double check all of the pages to be sure that the number of items corresponds to the number written by the child. It is important that they see the corresponding number and symbol done correctly or we are reinforcing a misconception/error.	
Math Vocabulary	It is important to review
Word for Today: rectangle	academic math vocabulary
Today you will review all of the words that the children have learned:	often throughout the day.
number	Complete the Vocabulary
circle	When possible have
square	students experience the word
triangle	(Ex. 4 students creating a
rectangle	right angle, multiple students
Have students draw on the white board as you say the word. Ask them to share with one another shat the word means.	acting out an equation).
Make the symbols and shapes on the board and ask students to identify them for you. Work with them to answer questions in complete sentences—for example, A square has 4 sides that are all the same rather than 4 sides.	
Activity	Focus on having young
Student Choice	people "compete" in pairs or
Review how to play the games One Less, One More, Count Down and Memory Match. Once you are sure that students know how to play each game, have them choose a partner and play the game that they most enjoy. This will be a good opportunity for you to be sure that these games can be placed in a center or in the "after homework is done" choice. It is important that children can play the game independently which you will know by the end of the session today. If they are not yet independent, then do not put the game out for them when you are not available to help and support the play.	is mastered you can utilize it in the "When Homework Is Complete" center.



Closing			
Review			
Say:			
Please recap what we did today.			
Did we achieve our objectives?			
Debrief			
What did you like about what we did today in math?			
What would you like to do more of the next time we do math?			
What is a rectangle?			
What is another shape that looks like a rectangle only all of the sides are even?			

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them



Component:	Math
Grade Level:	First Grade
Lesson Title:	One More #1
Focus:	Math Vocabulary, addition, subtraction, fact families

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Socks

Opening			
State the	ob	iecti	ive

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is a Fact Family? If you are adding the number 4 and 3 together, what is the fact family of three numbers? What is a sum?

What is another way of telling you to add?

Write a number sentence for the Fact Family 4, 3, and 7. Circle the sum.

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing). Sometimes you count forward or backward by 1s, other times by 2s, 3s, 4s, or many more. That's why addition and subtraction were invented so you didn't have to spend so much time counting. It is simply easier once you get the hang of it.

Content (the "Meat")	
Problem of the Day Look at the lines below. Which line is longer? How can you tell?	*Activity → Teachable Moment(s) <i>throughout</i>
A B	During the lesson check in with students repeatedly.
Have students draw this problem on the white board.	Check in about what is happening and what they are thinking.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both a	ddition Take advantage of any teachable moments.
and subtraction. The key is for children to learn that numbers have a relationship wi another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 2 - 2 - 1	th one Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
3 - 2 = 1 3 - 1 = 2	When possible, engage students in a "teach to learn"



After they have written the problem in all 4 w "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and You should have them practice this converses students every day. On the 5 th day, you will the conversation will follow the pattern, but the through his/her cards (of course we hope the correct response. Today you will introduce this activity and be Have students write the entire Fact Family of 1 + 5 = 6 5 + 1 = 6 6 - 1 = 5 6 - 5 = 1 Bring two students up to practice the convert Try it again with several other pairs of stude Then have children find a partner and practice Remember that today they are only doing the	opportunity and have the student become the teacher.
Math V Word for Today: equals The word equals means that the two sides of same. When you are looking at a Fact Fam numbers in the Fact Family are related, they For example 3 + 2 = 5. This problem says it total of 5. The Fact Family is then set—3, 2 Have children complete the Vocabulary note Vocabulary Notebook Sample: New Word equals Personal Connection We need to know how much that equals in order to order the right number. Students will complete this notebook for eac	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book.
A On Review how to play the game One More. V how to play the game, let them select a part have them change partners.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Purpose of the game:Practice recognizing the numbers between 1 and 10 and thenumber that is 1 more.Note:10 can only be an answer card.Materials:Deck of Cards (remove face cards and jokers)Players:2
Directions:
1. Shuffle the cards.
2. Deal 5 cards to each player.
3. Player 1 asks Player 2 (3 or 4) for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2, he/she would ask for a 3.
 If Player 2 has the card asked for, he/she gives it to Player 1. Player 1 then lays down his/her card and says, " (the card asked for) is one more than (the card Player 1 started with." Example: "3 is one more than 2."
 If Player 2 does not have the card asked for, he/she says, "Draw A Card", and Player 1 draws a card and adds to his/her hand.
6. Player 2 then repeats the procedure.
7. Game is over when all cards are matched or time is called.

	Closing		
	Review		
Say:			
•	Please recap what we did today.		
•	Did we achieve our objectives?		
	Debrief		
What d	l you like about what we did today in math?		
What w	What would you like to do more of the next time we do math?		
Give m	an example of two things that are equal.		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	One More #2
Focus:	Addition, comparing numbers/values

Materials:

Socks

White boards Crayolas decks of cards with face cards and jokers removed

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition?

What is a Fact Family? If you are adding the number 2 and 3 together, what is the fact family of three numbers? What is a sum?

In the Fact Family 2, 3, and 5 what is the sum?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing). Sometimes you count forward or backward by 1s, other times for 2s, 3s, 4s, or many more. That's why addition and subtraction were invented so you didn't have to spend so much time counting. It is simply easier once you get the hang of it.

Content (the "Meat")			
Problem of the Day Look at the two boxes below. Which one has the most Ha	*Activity → Teachable Moment(s) <i>throughout</i>		
		During the lesson check in with students repeatedly.	
Have students draw this problem on the white board.	Check in about what is happening and what they are thinking.		
Fact Practice Fact Practice for 1 st grade is looking at number families, s	Take advantage of any teachable moments.		
and subtraction. The key is for children to learn that numl another in adding and subtracting. Fact practice will follow Children will look at the math family. (We will begin with 1 They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.		
3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will	When possible, engage students in a "teach to learn" opportunity and have the		



"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, a You should have them practice this conver- students every day. On the 5 th day, you w the conversation will follow the pattern, but through his/her cards (of course we hope to correct response. Today you will introduce this activity and b Have students write the entire Fact Family 1 + 4 = 5 4 + 1 = 5 5 - 1 = 4 5 - 4 = 1 Bring two students up to practice the conver- Try it again with several other pairs of stud Then have children find a partner and practice Remember that today they are only doing the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the conver- tion of the several other pairs of students and practice the convertion of the several other pairs of students and practice the convertion of the several other pairs of students and practice the convertion of the several other pairs of students and practice the several other pairs of students and practice the convertion of the several other pairs of students and practice the several other pairs of students and pairs of students and pairs of students and	student become the teacher.	
Math Word for Today: plus The word plus can be used as another way +. Plus means to increase or be bigger. Have children complete the Vocabulary no Vocabulary Notebook Sample: New Word plus Personal Connection You can add two numbers by saying 5 plus 4	Vocabulary y of saying add. It is representing in the symbol tebook. My Description A word that means to add together Drawing 5 4 9 4 9 4 5 4 9 5 4 9 5 4 9 5 4 9 5 4 9 5 4 9 5 4 9 10 10 10 10 10 10 10 10 10 10	It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book.
Activity One More Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



numbe Materia	r that is 1 more. Note : 10 can only be an answer card. als: Deck of Cards (remove face cards and jokers)	
Players	s: 2	
Directi	ons:	
1.	Shuffle the cards.	
2.	Deal 5 cards to each player.	
3.	Player 1 asks Player 2 (3 or 4) for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2, he/she would ask for a 3.	
4.	If Player 2 has the card asked for, he/she gives it to Player 1. Player 1 then lays down his/her card and says, " (the card asked for) is one more than (the card Player 1 started with." Example: "3 is one more than 2."	
5.	If Player 2 does not have the card asked for, he/she says, "Draw A Card", and Player 1 draws a card and adds to his/her hand.	
6.	Player 2 then repeats the procedure.	
7	Game is over when all cards are matched or time is called	

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

Read the problem aloud: 6 + 9 = 15. 3 + 2 = 5. Did you use the word plus?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Beat the Dice #1
Focus:	Math vocabulary, basic operations, comparing numbers

Materials: White boards

dice

Crayolas Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is another way of telling you to add?

What is a Fact Family? If you are adding the number 2 and 4 together, what is the fact family of three numbers? What is a sum?

What does equals mean? How does the = sign connect the numbers of a Fact Family.

Content (the "Meat")		
Problem of the Day Below there is a ten frame. Some of the boxes have a Happy Face in them. How many more Happy Faces are needed to have 10? Tell how you know.	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in with students repeatedly. Check in about what is happening and what they are	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	thinking. Take advantage of any teachable moments.	
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.	
3-2 = 1 3-1 = 2 When possible, engages students in a "teach to l opportunity and have the student will respond with "Yes, and since that is true, $3-1 = 2$, and $3-2 = 1$ ".		



You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 1, 3, and 4. Have students write the entire Fact Family on the white board. 2 + 2 = 4 2 + 2 = 4 4 - 2 = 2 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 2, and 4. Talk about how we will continue with the four problems in the family even though two problems look exactly the same.	
Math Vocabulary	It is important to review
 Words for Today: addition, sum, plus, equals Today and tomorrow you will be working with the four words addition, sum, plus, and equals to talk about number sentences that you can create to define a problem. Write the problems on the board or chart paper. Have students read the problems aloud and then create the number sentence for each problem. Have students read the number sentence using key vocabulary words. Frank ate 2 pieces of bread for breakfast. He ate 2 more pieces for lunch. How many did he eat in all? Maria bought 4 cookies with pink frosting. She bought 5 cookies with blue frosting. How many cookies did she have in all? 	academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Activity Beat The Dice	Focus on having young people "compete" in pairs or
Review how to play the game with the students. When you are sure that they are clear on how to play the game, have them pick a partner to play the game with.	small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center
Purpose of the game: Practice determining if numbers are greater than, less than, or equal to another number. Players: 2 Directions:	
 Player rolls one die or if a larger number is desired, the player rolls two dice and finds the sum. 	
2. This becomes the target number	
3. Players prepare their white board in three columns.	
4. Column 1: > target number	
5. Column 2: < target number	



6.	Column 3: = to target number	
7.	The first player rolls two dice and adds the numbers	
8.	Player decides which column the number sentence goes into	
9.	Player writes the number sentence in the column (e.g. Target number is 7, 2 + 3 < 7)	
10.	Each player rolls 10 times.	
No	te: There is not a winner or a loser.	

Closing		
Review		
Say:		
Please recap what we did today.		
Did we achieve our objectives?		
Debrief		
What did you like about what we did today in math?		
What would you like to do more of the next time we do math?		
What are some of your favorite math vocabulary words?		
How do you use them in school?		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Beat the Dice #2
Focus:	Math vocabulary, fact families, addition

Materials: White boards

dice

Crayolas

Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is another way of telling you to add?

What is a Fact Family? If you are adding the number 4 and 3 together, what is the fact family of three numbers? What is a sum?

What does equals mean? How does the = sign connect the numbers of a Fact Family.

Content (the "Meat")		
Problem of the Day Look at the list of number. What are the missing numbers? Write them in. How do you	*Activity → Teachable Moment(s) <i>throughout</i>	
know you are right? 1 , 2,, 4, 5, 6,, 8, 9, 10	During the lesson check in with students repeatedly.	
Have students draw this problem on the white board.	Check in about what is happening and what they are	
Fact Practice	thinking.	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments.	
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 1, 3, and 4. Have students write the entire Fact Family on the white board. 1 + 6 = 7 6 + 1 = 7 7 - 1 = 6 7 - 6 = 1 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 1, 6, and 7.	
Math Vocabulary Words for Today: addition, sum, plus, equals Today and tomorrow you will be working with the four words addition, sum, plus, and equals to talk about number sentences that you can create to define a problem. Write the problems on the board or chart paper. Have students read the problems aloud and then create the number sentence for each problem. Have students read the number sentence using key vocabulary words. Mr. Torres has 10 books on a shelf. He buys 3 more books. How many books does he have in all? Jorge has 3 cars. He receives 8 new cars on his birthday. How many cares does Jorge have in all? Judy has 4 red hair ribbons. She gets 3 new ones for her birthday. How many red ribbons does Judy have in all?	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Activity Beat The Dice Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play Purpose of the game: Practice determining if numbers are greater than, less than, or equal to another number. Players: 2 Directions: 1. Player rolls one die or if a larger number is desired, the player rolls two dice and	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
finds the sum.2. This becomes the target number2. Discusso prepares their white beard in three columns.	
 Players prepare their white board in three columns. Column 1. A torget number. 	
 Column 1: > larget number Column 2: < target number 	



6.	Column 3: = to target number	
7.	The first player rolls two dice and adds the numbers	
8.	Player decides which column the number sentence goes into	
9.	Player writes the number sentence in the column (e.g. Target number is 7, $2 + 3 < 7$)	
10	Each player rolls 10 times.	
No	te: There is not a winner or a loser.	

C	losing	
R	Review	
Say:		
 Please recap what we did today. 		
 Did we achieve our objectives? 		
Debrief		
What did you like about what we did today in math?		
What would you like to do more of the next time we do math?		
How will you use today's math in school tomorrow?		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Up to Three #1
Focus:	Math vocabulary, basic operations

Materials:

White boards Crayolas

Socks

3 six-sided dice for each pair

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Give an example of a subtraction problem.

Why is the difference lower than the first number in a subtraction problem?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem.

Content (the "Meat")			
Problem of the Day Counting backwards is fun. Look at the list of numbers below. If you are counting	*Activity → Teachable Moment(s) <i>throughout</i>		
backwards, what numbers fit into the spaces? How do you know? 10, 9, 8, 7,, 5,, 2, 1	During the lesson check in with students repeatedly.		
Have students draw this problem on the white board.	Check in about what is happening and what they are		
Fact Practice	thinking.		
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments.		
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.		
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.		



students every day. On the 5 th day, you we the conversation will follow the pattern, but through his/her cards (of course we hope correct response. Today you will introduce this activity and I Have students write the entire Fact Family 2+5=7 5+2=7 7-2=5 7-5=2 Bring two students up to practice the conv Try it again with several other pairs of stud Then have children find a partner and prac- Remember that today they are only doing	vill utilize all 4 problems from the days before, and t the second responder will need to quickly look they remember without looking) and gives the begin with the Fact Family of 1, 3, and 4. on the white board. The white board. The section. Contents. Control to the conversation. Do this at least 4 times. The Fact Family of 2, 5, and 7.	
Math	Vacabulary	It is important to review
Matr Word for Today: minus Minus is another word for subtract. The s	ymbol for minus is It means to take away the	academic math vocabulary often throughout the day.
second number from the first number. In a number sentence you could say 7 minus (-) 5		notebook for each word.
		When possible, have
Have children complete the Vocabulary no	otebook.	students experience the word
Vocabulary Notebook Sample:		(EX. 4 students creating a right angle multiple students
New Word	My Description	acting out an equation).
minus	Means subtraction or taking away	Vocabulary Notebooks can be made from ½ of a composition book
Personal Connection	Drawing	
17 minus 11 equals 6.	13 - 6 = 7	
	Activity	Focus on having young
Up	o To Three	people "compete" in pairs or
Demonstrate how to play the game by br table. Ask for children to volunteer to lear Once you have taught 2, have each of the watching. Repeat one more time so that y When you start to play the game, put the not and you can observe the final four play	small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	
Purpose of the game: Practice adding n	umbers to find a correct sum.	
-		
Materials: Three 6-sided dice for the	egame	



Player	s: 2	
Directi	ions:	
1.	Players create a game board by writing the number 3-18 on a piece of paper or a white board.	
2.	Player 1 rolls 3 dice	
3.	Player totals the 3 dice and crosses out the number that represents the sum	
4.	If the number is already crossed out, the player may roll 1, 2, or 3 dice again For example, the player may keep 1 of the dice and roll only 2 to get another total	
5.	Player may roll up to 3 times before he/she loses his/her turn	
6.	Player 2 repeats	
7.	Game is over when time is called or all of the numbers are crossed out.	

Closing		
Review		
Say:		
Please recap what we did today.		
Did we achieve our objectives?		
Debrief		
What did you like about what we did today in math?		
What would you like to do more of the next time we do math?		
What is a number?		
What is a letter?		
Are they the same?		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.


Component:	Math
Grade Level:	First Grade
Lesson Title:	Up to Three #2
Focus:	Addition

Materials:

White boards Crayolas

Socks

3 six-sided dice for each pair

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Give an example of a subtraction problem.

Why is the difference lower than the first number in a subtraction problem?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem.

Content (the "Meat")	
Problem of the Day Look at the graph below. Children had to pick a favorite color. There is one heart for each	*Activity → Teachable Moment(s) <i>throughout</i>
child's vote. Which color has the most hearts by it? red ♥♥♥	During the lesson check in with students repeatedly.
green ♥♥ blue ♥♥♥♥	Check in about what is happening and what they are thinking.
Have students draw this problem on the white board.	Take advantage of any teachable moments.
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1 + 2 = 3$ $2 + 1 = 3$ $3 - 2 = 1$ $3 - 1 = 2$ After they have written the problem in all 4 ways they will find a partner and say,	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 1, 3, and 4. Have students write the entire Fact Family on the white board. 2 + 6 = 8 6 + 2 = 8 8 - 2 = 6 8 - 6 = 2 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 6, and 8.	
Math Vocabulary	It is important to review
 Words for Today: subtraction, difference, minus, equals Today and tomorrow you will be working with the four words subtraction, difference, minus and equals to talk about number sentences that you can create to define a problem. Fred had 9 cookies. He ate three cookies. How many does he have left? Juana had 11 socks that were green. She gave 4 of them away. How many does she have left? The library had 13 books on the shelf. A lady came and checked out 4 of them. How many are still on the shelf? Martin had 10 toy cars. He gave 3 to his little brother. How many does he have left? 	academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Activity	Focus on having young
Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play. Purpose of the game: Practice adding numbers to find a correct sum. Materials: Three 6-sided dice for the game Players: 2 Directions:	small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 Players create a game board by writing the number 3-18 on a piece of paper or a white board. Player 1 rolls 2 dias 	
2. Player 1 rolls 3 dice.	



- Player totals the 3 dice and crosses out the number that represents the sum.
 If the number is already crossed out, the player may roll 1, 2, or 3 dice again for example, the player may keep 1 of the dice and roll only 2 to get another total.
 Player may roll up to 3 times before he/she loses his/her turn.
 Player 2 repeats.
 Game is over when time is called or all of the numbers are crossed out.
- Closing Review Say: • Please recap what we did today. • Did we achieve our objectives? Debrief What did you like about what we did today in math? What did you like to do more of the next time we do math? What do you do when you add? What do you do to subtract?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Only 10 #1
Focus:	Fact families, math vocabulary, addition

Materials:

White boards

Crayolas

Socks

decks of cards with face cards and jokers removed

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about math?

What do you know about addition?

How old are you today? How old will you be on your next birthday? Did you simply say the next number? Did you add one to your current age? When you increase a number it is addition. How old are you today? How old were you before your last birthday? Did you simply count backwards? Did you subtract one from your current age? Subtraction is what you do when you decrease a number.

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing)

Content (the "Meat")	
Problem of the Day Romeo the cat is wearing a glove on each of his paws. How many gloves is Romeo	*Activity → Teachable Moment(s) <i>throughout</i>
wearing? Have students draw this problem on the white board.	During the lesson check in with students repeatedly.
Fact Practice	Check in about what is happening and what they are
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	the group is thinking. When possible, engage students in a "teach to learn"



The other student will respond with "Yes, You should have them practice this conve- students every day. On the 5 th day, you we the conversation will follow the pattern, but through his/her cards (of course we hope correct response. Today you will introduce this activity and be Have students write the entire Fact Family Bring two students up to practice the conver- Try it again with several other pairs of stu Then have children find a partner and pra Remember that today they are only doing	opportunity and have the student become the teacher.		
Math	n Vocabulary	It is important to review	
Word for Today: addition	5	academic math vocabulary	
The word addition means to increase or e For example if I have 3 birds and I acquire to the 3 old birds and have a total of 4 bird of birds that I have. Have children complete the Vocabulary n	often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students		
Vocabulary Notebook Sample:	My Deceription	acting out an equation)	
New word	My Description	Vocabulary Notebooks can	
addition	Math you do when you combine items from several groups into one group	be made from ½ of a composition book	
Personal Connection	Drawing		
Addition is easy and I like to do it.	4 + 9 = 13		
Students will complete this notebook for each vocabulary word that they are given.			
	Focus on having young people "compete" in pairs or small groups. Once a game		
 Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play. Purpose of the game: Practice addition facts to 10. Materials: Deck of Cards (remove face cards and jokers) 		is mastered you can utilize it in the "When Homework Is Complete" center	



Players: 2	
Directions:	
1. Shuffle the cards.	
2. Place cards in a 4 x 4 grid (4 rows and 4 columns), face down.	
3. Remainder of cards will be placed on the side of the grid.	
4. Game is played like Memory, except the player is trying to turn over two numbers	
that equal exactly 10.	
5. If player turns over two cards that equal 10, they collect the cards, replace the	
cards they took from the pile, and take another turn.	
6. If player does not find two numbers that equal exactly 10, then player loses turn	
and the next player begins.	
7. Game is over when there are no more matches to be made.	

C	Closing
F	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
D	Debrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do mat	h?
What are some strategies you use to add?	
What is the total of 3 and 8?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Just the Facts #1
Focus:	Math vocabulary, basic operations, fact families,

Materials:

White boards Crayolas

Socks

Double 9 Dominoes (attached to this lesson plan)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtracting?

How is subtraction different from addition?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem.

Content (the "Meat")		
Problem of the Day Look at the rectangles below. Which is the widest? How do you know?	*Activity → Teachable Moment(s) <i>throughout</i>	
	During the lesson check in with students repeatedly.	
	Check in about what is happening and what they are thinking.	
Have students draw this problem on the white board.	Take advantage of any teachable moments.	
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1+2=3$ $2+1=3$ $3-2=1$ $3-1=2$	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



After they have written the problem in all 4 "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, a You should have them practice this conver- students every day. On the 5 th day, you we the conversation will follow the pattern, but through his/her cards (of course we hope to correct response. Today you will introduce this activity and b Have students write the entire Fact Family 2 + 4 = 6 4 + 2 = 6 6 - 2 = 4 6 - 4 = 2 Bring two students up to practice the conver- Try it again with several other pairs of stude Then have children find a partner and prac- Remember that today they are only doing		
Math	Vocabulary	It is important to review academic math vocabulary
Difference is the word that means the answ	ver to a subtraction problem. It is the amount	often throughout the day.
that is left when you start with a particular you have the difference left.	amount and then take a certain amount away,	notebook for each word.
		When possible, have
Have children complete the Vocabulary notebook. Vocabulary Notebook Sample:		(Ex. 4 students creating a
New Word	My Description	right angle, multiple students acting out an equation).
difference	The difference is the result of a subtraction problem	Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection	Drawing	
What is the difference between 13 and 8?		
 	Activity	Focus on having young
JUST THE FACTS		small groups. Once a game
Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children.		is mastered you can utilize it in the "When Homework Is
Once you have taught 2, have each of the	Complete" center.	
watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do		



not and you can observe the final four play.	
Purpose of the game: Practice addition facts	
Materials: Double 9 Dominoes, 1 set for each group	
Players: 2	
Directions:	
1. Dominoes are placed in the center of the table, face down.	
 After deciding who will go first, Player 1 draws a domino, turns it face up and places it down in front of him/her. 	
 Player 1 totals the pips on the domino by saying (e.g. 2 + 4 = 6). If the answer is correct, then player keeps the domino and play moves on to player 2. 	
4. If player does not say the correct sum, then the domino is returned to the pile	
5. Play continues until all dominoes are taken.	

Clo	osing
Re	eview
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
De	ebrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	?
How can you use the math we worked on today in school tor	norrow?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Double 9 Dominoes

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Component:	Math
Grade Level:	First Grade
Lesson Title:	Only 10 #2
Focus:	Math vocabulary, addition, and patterns

Materials:

Socks

White boards Crayolas decks of cards with face cards and jokers removed

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition?

What is a Fact Family? If you are adding the number 2 and 3 together, what is the fact family of three numbers? Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing). Sometimes you count forward or backward by 1s, other times for 2s, 3s, 4s, or many more. That's why addition and subtraction were invented so you didn't have to spend so much time counting. It is simply easier once you get the hang of it.

Content (the "Meat")	
Problem of the Day	*Activity \rightarrow Teachable
Look at the pattern below. Copy it and add the next 3 shapes. How do you know you are	woment(s) inroughout
♥ © ♥ © ♥	buring the lesson check in with students repeatedly.
Have students draw this problem on the white board.	Check in about what is happening and what they are
Fact Practice	thinking.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments.
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Stop the class and focus on a student's key learning or understanding. Ask open-
1 + 2 = 3 2 + 1 = 3 3 - 2 = 1	ended questions to determine what the rest of the group is thinking
3 – 1 = 2	When possible ongogo
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	students in a "teach to learn"
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	opportunity and have the



You should have them practice this conversion students every day. On the 5 th day, you we the conversation will follow the pattern, but through his/her cards (of course we hope to correct response. Today you will introduce this activity and the Have students write the entire Fact Family $1 + 3 = 4$ 3 + 1 = 4 4 - 1 = 3 4 - 3 = 1 Bring two students up to practice the convert try it again with several other pairs of students and prace Remember that today they are only doing	student become the teacher.	
Math	Vocabulary	It is important to review
Word for Today: sum	Vocabulary	academic math vocabulary
The word sum represents the answer that	you get when you add things together or you	often throughout the day
increase your original amount by another a	amount When you add things together of you	Complete the Vocabulary
Have children complete the Vocabulary no	itebook	notebook for each word.
Vocabulary Notebook Sample:		When possible, have
New Word	My Description	students experience the word
		(Ex. 4 students creating a
sum	Answer to an addition problem	right angle, multiple students
Personal Connection	Drawing	vocabulary Notebooks can be made from 1/2 of a
		composition book
	Addition:	
	8 + 3 = 11	
What is the sum of 9 and 5?	Addend Addend Sum	
Students will complete this notebook for early a students will complete the students will complete the students will be a student stud	ach vocabulary word that they are given	
	active decision and that they are given.	
	Activity	Focus on having young
(Dnly 10.	people "compete" in pairs or
	small groups. Once a game	
Review with students how you play the ga	me only 10. Check to be sure that they have a	is mastered you can utilize it
good understanding of now to play the gar	In the "When Homework IS	
them to find a new partner	Complete Center	
Purpose of the game: Practice addition t		
Materials: Deck of Cards (remove fa		
Players: 2		
Directions:		
1 Shuffle the cards		



2.	. Place cards in a 4 x 4 grid (4 rows and 4 columns), face down.	
3.	Place remainder of cards in a pile and place on the side of the grid.	
4.	. Game is played like Memory, except the player is trying to turn over two numbers	
	that equal exactly 10.	
5.	. If player turns over two cards that equal 10, they collect the cards, replace the	
	cards they took from the pile, and take another turn.	
6.	. If player does not find two numbers that equal exactly 10, then player loses turn	
	and the next player begins.	
7.	. Game is over when there are no more matches to be made.	

Clos	sing
Rev	riew
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
Deb	prief
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
What mathematical operation are you using when you find the	e sum?
What is another word for "sum"?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Just the Facts #2
Focus:	Math vocabulary, fact families,

Materials:

White boards Crayolas

Socks

Double 9 Dominoes (attached to this lesson plan)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtracting?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem.

Content (the "Meat")	
Problem of the Day Jill has 4 Happy Faces. Draw a group of Happy Faces that has 1 more than Jill.	*Activity → Teachable Moment(s) <i>throughout</i>
Jill = $\bigcirc \odot \odot \bigcirc$ Have students draw this problem on the white board.	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	Check in about what is happening and what they are thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



correct response. Today you will introduce this activity and b Have students write the entire Fact Family 2 + 3 = 5 3 + 2 = 5 5 - 2 = 3 5 - 3 = 2 Bring two students up to practice the conver- Try it again with several other pairs of stud Then have children find a partner and prac- Remember that today they are only doing the	egin with the Fact Family of 1, 3, and 4. on the white board. ersation. ents. tice the conversation. Do this at least 4 times. he Fact Family of 2, 3, and 5.	
Math Word for Today: subtract Subtract means to reduce a total by a certa having 5 cookies and eating 2 of them and sentence for this story if would say 5 – 2 = Have children complete the Vocabulary no Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a	
New Word	My Description	acting out an equation).
subtract	Minus or take away from a total	Vocabulary Notebooks can be made from ½ of a composition book
Personal Connection	Drawing	
Subtract 9 from 17 to find the difference.	-217=14	
ļ	Activity	Focus on having young
Just Demonstrate how to play the game by brin table. Ask for children to volunteer to learn Once you have taught 2, have each of ther watching. Repeat one more time so that yo When you start to play the game, put the 8 not and you can observe the final four play	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	
Purpose of the game:Practice addition faMaterials:Double 9 Dominoes, 1 setPlayers:2Directions:		
1. Dominoes are placed in the center	of the table, face down.	
2. After deciding who will go first, Pla	yer 1 draws a domino, turns it face up and	



places it down in front of him/her.

- 3. Player 1 totals the pips on the domino by saying (e.g. 2 + 4 = 6). If the answer is correct, then player keeps the domino and play moves on to player 2.
- 4. If player does not say the correct sum, then the domino is returned to the pile
- 5. Play continues until all dominoes are taken.

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Double 9 Dominoes

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Component:	Math
Grade Level:	First Grade
Lesson Title:	Student Activity Choice
Focus:	Math

Materials:

White boards Crayolas

Socks

supplies for all of the games you have taught the students

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Tell the difference between adding and subtracting.

Tell the difference between plus and minus.

Will you have a sum in an addition or a subtraction problem?

Will you have a difference in an addition or a subtraction problem?

Content (the "Meat")			
Problem of the Day Name the shapes below.	*Activity → Teachable Moment(s) <i>throughout</i>		
$\square \land \square \land \land$	During the lesson check in with students repeatedly.		
Have students draw this problem on the white board.	Check in about what is happening and what they are thinking.		
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	Take advantage of any teachable moments.		
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.		
3-2=1 3-1=2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher		



You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 1, 3, and 4. Have students write the entire Fact Family on the white board. 2 + 7 = 9 7 + 2 = 9 9 - 2 = 7 9 - 7 = 2 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 7, and 9.	
Math Vessbulery	
Math Vocabulary Words for Today: subtraction, difference, minus, equals Today and tomorrow you will be working with the four words subtraction, difference, minus and equals to talk about number sentences that you can create to define a problem. Laura has 9 small angels. She took 3 of them to her grandmother. How many does she have left? Joe is very good at track. He has won 14 ribbons. He has them in an envelope. He hung 7 of the ribbons on his wall. How many are still in the envelope? Phillip was served 6 mini hamburgers on his plate. He has eaten 2 of them. How many are left on the plate? Patty had 12 candy bars. She gave 5 of them to her friends. How many does she have left?	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Activity Student Choice You have taught the students several games: Only 10, One More, Beat the Dice, Just the	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is
Facts, and Up to Three Review how you play each of the games and then invite the students to select the game that they would like to play today.	Complete" center.
Have students pair up with one another to play the games. After about 10 minutes, invite them to switch both partners and games. Do not insist that they do this, simply give them the opportunity to make another choice.	
Be sure that you have all of the supplies you need for them to play all of the games.	



Closing
Review
Say:
Please recap what we did today.
Did we achieve our objectives?
Debrief
What did you like about what we did today in math?
What would you like to do more of the next time we do math?
Which is your favorite game? What about it do you like?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them



Component:	Math
Grade Level:	First Grade
Lesson Title:	Roll and Compare #1
Focus:	Comparing Numbers

Materials:	
White boards	dice
Crayolas	Roll and Compare Game Board
Socks	Comparison Cards

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Give an example of a subtraction problem.

Why is the difference lower than the first number in a subtraction problem?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem...

Content (the "Meat")			
Problem of the Day Write the number that comes before 39. Write the number that comes after 39. How do you	*Activity → Teachable Moment(s) <i>throughout</i>		
know you are right? Have students draw this problem on the white board.	During the lesson check in with students repeatedly.		
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and	happening and what they are thinking.		
subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.		
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking		
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.		



response. Today you will introduce this activity and begin Have students write the entire Fact Family on 4 + 4 = 8 4 + 4 = 8 8 - 4 = 4 Bring two students up to practice the conversa Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the		
Math Vocabulary Math Vocabulary Word for today: 10s Review yesterday's conversation with the children. Talk about how we write numbers when we count by 10s. Ask children to count by 10s to 100. As they say each number, write the number on the board. Children should show ten fingers and then close hands into fists and then show ten fingers again when they say the next number. After counting to 100 by tens, show children that the math problem looks like 10 + 10 = 20, 10 + 10 + 10 = 30 and so on. Have children review the vocabulary entry from yesterday and make any additions or adjustments as needed for today. Vocabulary Notebook Sample: New Word My Description tens Counting numbers that are 10 apart, like 9, 19, 29, 39, and so on		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection I can count by 10s to 500.	Drawing 3, 13, 23, 33, 43	
Ac Roll an Review how to play the game Roll and Compa When you are sure that they can play on their game. You will use the materials from yester Materials: Two 6-sided dice for each pla Game Board Game Tokens Comparison Cards I Vis-à-vis pens Players: 2-4 Purpose of the game: Practice determining is or equal to another number. Directions: 1. Players prepare their own Roll and Comparison Cards I	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is .	



	the board. Players should write the numbers 0-15 in the boxes, one number per box.									
	Player may use a number more than one time.)									
2.	Playe	er 1 d	raws	a cor	nparis	son card and calls out the comparison.				
3.	Playe	er 1 th	nen ro	olls 2	dice a	and tells the other players the numbers represented on the				
	dice.									
4.	Players select a number on their board that meets the criteria determined by the									
	comparison die and place a game marker over the number									
5.	Procedure continues with Player 2 leading and rolling									
6	Game is over when 1 or more people have covered 5 in a row column, or diagonal									
01	See 9	amn	le ho:	ard						

Closing			
Review			
Say:			
Please recap what we did today.			
Did we achieve our objectives?			
Debrief			
What did you like about what we did today in math?			
What would you like to do more of the next time we do math?			
What does it mean to compare a number?			
Nhat do these symbols mean: < and >?			

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Role and Compare #2
Focus:	Comparing Numbers

Materials:	
White boards	dice
Crayolas	Roll and Compare Game Board (at end of lesson plan)
Socks	< and > cards (at end of lesson plan)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Give an example of a subtraction problem.

Why is the difference lower than the first number in a subtraction problem?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem..

Content (the "Meat")	
Problem of the Day	*Activity \rightarrow Teachable
If the $\mathfrak{P} = 3$ and a $\Psi = 1$, what is the sum of	Moment(s) throughout
-☆ + ♥ =	During the lesson check in with students repeatedly.
Tell now you know.	Check in about what is
Have students draw this problem on the white board.	happening and what they are
Fact Practice	thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any
another in adding and subtracting. Fact practice will follow this pattern every day.	teachable moments.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Stop the class and focus on a
They will write the problem in four ways.	student's key learning or
1 + 2 = 3	understanding. Ask open-
2 + 1 = 3	ended questions to
3 – 2 = 1	determine what the rest of
3 – 1 = 2	the group is thinking.
After they have written the problem in all 4 ways they will find a partner and say,	When possible, engage
"If 1 + 2 = 3, then 2 + 1 =3".	students in a "teach to learn"
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	opportunity and have the
You should have them practice this conversation (exactly as it is written) with 3-5 other	student become the teacher.
students every day. On the 5 th day, you will utilize all 4 problems from the days before, and	
the conversation will follow the pattern, but the second responder will need to quickly look	
through his/her cards (of course we hope they remember without looking) and gives the	



correct response. Today you will introduce this activity and beg	in with the Fact Family of 3, 9 and 12					
Have students write the entire Fact Family on						
3 + 9 = 12 $9 \pm 3 = 12$						
12 - 3 = 9						
12 - 9 = 3						
Bring two students up to practice the convers	ation.					
Try it again with several other pairs of student	S.					
Then have children find a partner and practice	e the conversation. Do this at least 4 times.					
Remember that today they are only doing the	Fact Family of 3, 9 and 12.					
Math Vo	cabulary	It is important to review				
word for loday: tens		often throughout the day.				
I ensits the word we use to describe the place	e that a numeral can be that represents	Complete the Vocabulary				
on the left. The number 10 means 1 ten and	no ones. When we get to 10 it is like we	notebook for each word.				
bundled the items together and instead of have	ving to count again and again, we can simply	When possible, have				
look at the bundle and know that it is 10. Just	t like a dime is 10 pennies collected into one	students experience the word				
coin, a 10s bundle is 10 items collected into o	ne item—usually with a rubber band or some	(Ex. 4 students creating a				
other way to separate the group of ten from e	verything else. Ask children to share different	right angle, multiple students				
ways that you could bundle 10 together (bage	ie, paper clip, rubber band, envelope, etc.)	acting out an equation.				
Have children complete the Vocabulary noteb	ook.	Vocabulary Notebooks can				
		composition book.				
Vocabulary Notebook Sample:	M. Description					
New word	My Description					
tens	Number that are separated by 10, also the					
	tens place to create larger numbers					
	Declar					
Personal Connection	Drawing					
Now that I am 10. I have a numeral in the						
tens place.	10					
<u>ι</u>	ivity					
Roll and	Compare	people "compete" in pairs or				
Demonstrate how to play the game by bringi	ng the children all together around a single	small groups. Once a game				
table. Ask for children to volunteer to learn he	ow to play the game. Begin with 2 children.	is mastered you can utilize it				
Once you have taught 2, have each of them t	each 1 other student while everyone is	in the "When Homework Is				
When you start to play the game, but the 9 will	now nave 4 children teaching 4 other children.	Complete" center.				
not and you can observe the final four play	to know now to play the game with 8 who do					
Materials: Two 6-sided dice for each play.	aver					
Game Board						
Game Tokens						
Game Tokens						



				Vis	-à-vis	pens				
Players	Players: 2-4									
Purpos	e of t	he ga	ame:	Pra	ctice	determining if numbers are greater than, less than,				
betweer	n, or e	equal	to ar	nothe	r num	iber.				
Directio	ons:									
1.	Playe	ers pr	repar	e the	ir owr	n Roll and Compare game board. (There are 25 squares				
	on th	e boa	ard.	Playe	ers sh	ould write the numbers 0-15 in the boxes, one number per				
	box.	Play	er m	ay us	e a n	umber more than one time.)				
2.	Playe	er 1 d	Iraws	a co	mpar	ison card and calls out the comparison				
3.	Playe	er 1 tl	hen r	olls 2	dice	and tells the other players the numbers represented on				
	the d	ice								
4.	Playe	ers se	elect	a nur	nber	on their board that meets the criteria determined by the				
F	comp	Darisc	on ale	e and	place	e a game marker over the number				
5.	5. Procedure continues with Player 2 leading and rolling									
6.	Gam	e is c	over v	when	I OF I	nore people nave covered 5 in a row, column, or diagonal.				
	See sample board:									
			-							

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do m	ath?
When would you compare numbers?	
When would you want the largest number? When would	you want the smallest?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Roll and Compare Game Board



Greater Than—Less Than Comparison Cards

UP ↑	UP 1
UP ↑	UP ↑
UP 1	UP 1
UP ↑	UP ↑
	VP ↑ UP ↑ UP ↑



Component:	Math
Grade Level:	First Grade
Lesson Title:	Beat the Dice #1
Focus:	Comparison of Numbers < and >

Materials:	
White boards	Dice
Crayolas	Socks

Opening		
State the objective		
Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.		
Gain prior knowledge by asking students the following questions		
What do you know about subtracting?		
How is subtraction different from addition?		
In a Fact Family how does the arrangement of the numbers change when you subtract?		
What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem.		

Content (the "Meat")	
Problem of the Day Draw a picture to show the number sentence written below.	*Activity → Teachable Moment(s) <i>throughout</i>
7 - 3 = 4 Have students draw this problem on the white board.	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	happening and what they are thinking.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
Today you will introduce this activity and begin with the Fact Family of 3, 8 and 11	



Have students write the entire Fact Famil	y on the white board.	
3 + 8 = 11 9 + 2 = 11		
11 - 3 = 8		
11 – 8 = 3		
Bring two students up to practice the con-		
Try it again with several other pairs of stu	dents.	
Then have children find a partner and practice the conversation. Do this at least 4 times.		
Remember that today they are only doing the Fact Family of 3, 8 and 11.		
Math Vocabulary		It is important to review
Word for Today: count		often throughout the day
Review the conversation from yesterday	Complete the Vocabulary	
them when it would be best to count by 5	notebook for each word.	
children review the Vocabulary Notebook from vesterday with a peer and make any		When possible, have
additions or corrections.		students experience the word. (Ex. 4 students
Vocabulary Notebook Sample:		
New Word	My Description	creating a right angle,
Count	Coving the numbers in order to identify how	multiple students acting out
Count	Saying the numbers in order to identify now many of something there is	dii eyudiioii.) Maaabularu Natabaalka aar
	many or something increas	he made from 1/2 of a
Personal Connection	Drawing	composition book.
	123456	
Please count the number of marbles		
that I have in the jar.		
	Activity	Focus on having young
Be	people "compete" in pairs or	
Review how to play the game. Remind s	tudents to think carefully before placing the	small groups. Once a game
number they rolled in the correct column.		is mastered you can utilize it
Purpose of the game: Practice determine	ning if numbers are greater than, less than, or	in the "When Homework Is
equal to another number.	Complete" center.	
1 Player rolls one die or if a larger i	number is desired, the player rolls two dice and	
finds the sum.	iumber is desired, the player rolls two dice and	
2. This becomes the target number.		
3. Players prepare their white board in three columns.		
4. Column 1: > target number.		
 Column 2: < larget number. Column 3: - to target number. 		
7 The first player rolls two dice and		
8. Player decides which column the		
9. Player writes the number senten		
7).		
IU. Each player folls TU limes.		
	Я	


Closing		
Review		
Say:		
Please recap what we did today.		
Did we achieve our objectives?		
Debrief		
What did you like about what we did today in math?		
What would you like to do more of the next time we do math?		
What does it mean to compare numbers?		
What does this sign mean: </td		
How would you use is to compare the number 5 and 9?		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Beat the Dice #2
Focus:	Comparisons < or > or =

Materials:	
White boards	Dice
Crayolas	Socks

Opening		
State the objective		
Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.		
Gain prior knowledge by asking students the following questions		
What do you know about subtracting?		
In a Fact Family how does the arrangement of the numbers change when you subtract?		

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem..

Content (the "Meat")	
Problem of the Day	*Activity
If you were to count from 20 to 22, would you count forward 2 or backward 2? How do you know? Share with a peer.	Moment(s) <i>throughout</i> During the lesson check in
Have students draw this problem on the white board.	with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking. Take advantage of any
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	teachable moments.
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 3, 7 and 10 Have students write the entire Fact Family on the white board.	students in a "teach to learn" opportunity and have the student become the teacher.



3 + 7 = 10 7 + 3 = 10 10 - 3 = 7 10 - 7 = 3 Bring two students up to practice the conve Try it again with several other pairs of stude Then have children find a partner and pract Remember that today they are only doing t		
Math Word for Today: count Count is a word that describes what we do saying 1, 2, 3, 4, 5, and so on. Sometimes we count by 5s, we have to move 5 items of by ones, we count one item at a time. You When you count forward the number gets la number you say is smaller than the one be Have children complete the Vocabulary not Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word. (Ex. 4 students creating a right angle, multiple students acting out	
New Word count	My Description Identify the amount of things that you have	an equation.) Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection I can count to 500.	Drawing 1, 2, 3, 4, 5	
Activity Beat the Dice Demonstrate how to play the game by bringing the children all together around a single table. (Note: you played this game last month so children may remember how to play the game after a quick review). Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play. Materials: Two 6-sided dice for the game White Boards Vis-à-vis pens Players: 2-4 Purpose of the game: Practice determining if numbers are greater than, less than, or equal to another number. Directions: 1. Player rolls one die or if a larger number is desired, the player rolls two dice and finds the sum. 2. This becomes the target number.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



3.	Players prepare their white board in three columns.	
4.	Column 1: > target number	
5.	Column 2: < target number	
6.	Column 3: = to target number	
7.	The first player rolls two dice and adds the numbers.	
8.	Player decides which column the number sentence goes into.	
9.	Player writes the number sentence in the column (e.g. Target number is 7, 2 + 3 <	
	7).	
10	. Each player rolls 10 times.	
No	te. There is not a winner or a loser	

Closing		
Review		
Say:		
Please recap what we did today.		
Did we achieve our objectives?		
Debrief		
What did you like about what we did today in math?		
What would you like to do more of the next time we do math?		
Start at 43 and count to 61.		
Start at 82 and count backwards to 63.		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Put Them in Order
Focus:	Counting

Materials:	
White boards	Place Them In Order game board
Crayolas	number cards
Socks	
Socks	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about math?

What do you know about addition?

How many fingers do you have on your right hand? How many fingers do you have on your left hand? How many fingers do you have altogether? Did you add or did you count? When you increase a number it is addition. How many fingers do you have on 2 hands. If you take the fingers on one hand away and hid them behind your back, how many fingers do you have showing? Did you count backwards? Did you subtract? Subtraction is what you do when you decrease a number. Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing).

Content (the "Meat")	
Problem of the Day	*Activity \rightarrow Teachable Moment(s) throughout
Nancy has 3 black rocks and 9 white rocks in a bag. If Nancy pulls a rock out of the bag without looking, which color rock is she most likely to pull out? Why do you think what you think?	During the lesson check in with students repeatedly.
Have students draw this problem on the white board.	Check in about what is
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	happening and what they are thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	When possible, engage students in a "teach to learn" opportunity and have the



You should have them practice this convers students every day. On the 5 th day, you will the conversation will follow the pattern, but t through his/her cards (of course we hope the correct response. Today you will introduce this activity and beg Have students write the entire Fact Family of 2 + 8 = 10 8 + 2 = 10 10 - 2 = 8 10 - 8 = 2 Bring two students up to practice the conver Try it again with several other pairs of stude Then have children find a partner and practi Remember that today they are only doing the	student become the teacher.	
Math V	/ocabulary	It is important to review
Word for Today: ones The word "ones" identifies the place value of a number. The ones place is the number that is written furthest to the right or if a number has only a single digit, then that numeral is in the ones place. The numerals: 0, 1, 2, 3, 4, 5,6,7,8, and 9 can all find themselves in the ones place—just one at a time. In the number 34, 4 is in the ones place, in the number 76, the 6 is in the ones place. Try several other numbers to determine the digit that is in the ones place. Have children complete the Vocabulary notebook. Vocabulary Notebook Sample: New Word My Description ones We count by 1s when we say a number that is one more		academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
I can count by ones.	1 , 2 , 3 , 4	
Students will complete this notebook for eac	h vocabulary word that they are given.	
Activity Put Them In Order Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play. Materials: Put Them In Order game board and numbers at the end of this game.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Prepare these by cutting out the numbers.

Directions:

- 1. Take the numbers and lay them out on the table face up.
- 2. Take turns and put the numbers in order on the Put Them In Order game board.
- 3. Say the number as you place it on the board.

Closing			
Review			
Say:			
Please recap what we did today.			
Did we achieve our objectives?			
Debrief			
What did you like about what we did today in math?			
What would you like to do more of the next time we do math?			
Start at 15 and count to 25.			
Start at 49 and count backwards to 31.			

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Hundreds Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



Number Cards to cut apart, print on different color paper from the Hundreds Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



Component:	Math
Grade Level:	First Grade
Lesson Title:	Only 10
Focus:	Addition

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition?

What is a Fact Family? If you are adding the number 2 and 3 together, what is the fact family of three numbers?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing). Sometimes you count forward or backward by 1s, other times for 2s, 3s, 4s, or many more. That's why addition and subtraction were invented so you didn't have to spend so much time counting. It is simply easier once you get the hang of it.

Content (the "Meat")	
Problem of the Day Jorge wants to read 5 pages in his book. He has already read 2 pages. How many more pages does Jorge need to read? Tell why you think what you think.	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, 'If $1 + 2 = 3$, then $2 + 1 = 3$ ''. The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ''. You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look	 During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the
through his/her cards (of course we hope they remember without looking) and gives the correct response.	student become the teacher.



Today you will introduce this activity and beg	jin with the Fact Family of 2, 9 and 11.	
2 + 9 = 11		
9 + 2 = 11		
11 – 2 = 9		
11 – 9 = 2		
Bring two students up to practice the converse	sation.	
Try it again with several other pairs of studer	its.	
I hen have children find a partner and practic	the conversation. Do this at least 4 times.	
Remember that today they are only doing the		
Math V	ocabulary	It is important to review academic math vocabulary often throughout the day Complete the Vocabulary
Word for Today: ones		
Review the conversation that you had with the place value.	e students yesterday about ones and the ones	
Have children share the Vocabulary noteboo	k with another student. Make any corrections	notebook for each word.
or additions that you think you should make	o be more clear about "ones".	When possible, have
Vocabulary Notebook Sample:		students experience the
New Word	My Description	creating a right angle
	-	multiple students acting out
ones	The place in a number than identifies units,	an equation.)
	Values less triait to	Vocabulary Notebooks can
Demonal Connection	Drouing	be made from ½ of a
Personal Connection	Drawing	composition book.
She will place the pumoral Q in the energy		
she will place the numeral of in the ones	7 1 5	
pidde.		
Students will complete this notebook for eacl	n vocabulary word that they are given.	
Ac	tivity	Focus on having young
On	ly 10!	people "compete" in pairs or
De la l'Illa de de la companya de lla companya		small groups. Once a game
Review with students now you play the game	e Only IU. (You played it last month) Check to	Is mastered you can utilize it
that they have a good understanding have t	Complete" center	
about 10 minutes ask them to find a new pa	complete center	
Purpose of the game: Practice addition fac		
Materials: Deck of Cards (remove face		
Players: 2		
Directions:		
1. Shuffle the cards.		
 2. Place cards in a 4 x 4 grid (4 rows all 2. Place remainder of cards in a sile and 		
 Hace remainder of cards in a pile and A Game is played like Memory exception 		
that equal exactly 10		
5. If player turns over two cards that ec		



	cards they took from the pile, and take another turn.	
6.	If player does not find two numbers that equal exactly 10, then player loses turn	
	and the next player begins.	
7.	Game is over when there are no more matches to be made.	

	Closing
	Review
Say:	
٠	Please recap what we did today.
٠	Did we achieve our objectives?
	Debrief
What di	id you like about what we did today in math?
What w	rould you like to do more of the next time we do math?
What a	re some things that come in groups of 10?
What n	umber comes just before 10? Just after?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Clear the Deck #1
Focus:	Number Recognition

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is a Fact Family? If you are adding the number 4 and 3 together, what is the fact family of three numbers? What is a sum?

What is another way of telling you to add?

Write a number sentence for the Fact Family 4, 3, and 7. Circle the sum.

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing). Sometimes you count forward or backward by 1s, other times for 2s, 3s, 4s, or many more. That's why addition and subtraction were invented so you didn't have to spend so much time counting. It is simply easier once you get the hang of it.

Content (the "Meat")	
Problem of the Day Show an AABB pattern. Explain your thinking as to why your drawing is this AABB pattern.	*Activity → Teachable Moment(s) <i>throughout</i>
	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The low is far abildren to loarn that numbers have a relationship with one	Check in about what is happening and what they are thinking.
another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
After they have written the problem in all 4 ways they will find a partner and say,	the group is thinking.
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other	when possible, engage students in a "teach to learn" opportunity and have the



students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 3, 4 and 7. Have students write the entire Fact Family on the white board. 3 + 4 = 7 4 + 3 = 7 7 - 3 = 4 7 - 4 = 3 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 3, 4 and 7		student become the teacher.
Math Vo Word for Today: graph Remind students that yesterday we discussed compare different answers to the same quest red, green, or blue the best when thinking of t board that will show the student responses. It see how each one of them is linked to one of his/her preference and then chart the information sentence that explains the graph and write it Have children review the entry from yesterday with a peer. After discussion, student may active Vocabulary Notebook Sample: New Word graph Personal Connection We will make a graph to show how many Skittle there are of each color.	d how a graph is a picture that helps us to ion. Ask the children to determine if they like those three colors. Create a graph on the Draw a sample of grid paper so children can the responses. Ask each child one at a time tion. At the end have children create a on the board. y that they made in the Vocabulary notebook d or change the notebook if necessary My Description A chart that shows the relationship of information and numbers Drawing	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word. (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book.
Students will complete this notebook for each	vocabulary word that they are given.	
Activity Clear the Deck Review how to play the game Clear the Deck. When you are certain that the children remember how to play the game, let them select a partner to play the game with. After 10 minutes, have them change partners. Materials: Game cards from yesterday Directions:		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



- 1. Shuffle the cards and divide them equally between two players
- 2. Each person should place his/her 15 cars in a row on his "deck"
- 3. First player turns over one of his/her cards. Person tells the missing number. If he/she is correct, then the card is cleared from the deck and set aside. If child can not name the missing number, he/she turns the number back over and loses his/her turn
- 4. Winner is first student who clear the deck first

C	losing
F	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
C)ebrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do mat	h?
What can we make a graph of in our program?	
When would a graph be helpful in sharing information?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Clear the Deck #2
Focus:	Sequencing

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Clear the Deck cards
Socks	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition?

What is a Fact Family? If you are adding the number 2 and 3 together, what is the fact family of three numbers? What is a sum?

In the Fact Family 2, 3, and 5 what is the sum?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing). Sometimes you count forward or backward by 1s, other times for 2s, 3s, 4s, or many more. That's why addition and subtraction were invented so you didn't have to spend so much time counting. It is simply easier once you get the hang of it.





2 2 1		apportunity and have the
3 - 2 = 1 2 1 2	opportunity and have the	
3 - 1 = 2	Student become the teacher.	
"If $1 \pm 2 = 3$ then $2 \pm 1 = 3$ "	iys they will lind a particle and say,	
The other student will respond with "Ves and	since that is true $3 - 1 - 2$ and $3 - 2 - 1''$	
You should have them practice this conversat	ion (exactly as it is written) with 3.5 other	
students every day. On the 5th day, you will u	tilize all 4 problems from the days before and	
the conversation will follow the pattern, but the	a second responder will need to quickly look	
through his/her cards (of course we hope they	remember without looking) and gives the	
correct response	remember without looking) and gives the	
Today you will introduce this activity and bed	in with the Eact Family of 3, 3, and 6	
Have students write the entire Eact Family on	the white board	
3 + 3 = 6	the write board.	
3 + 3 = 6		
6 - 3 = 3		
6 - 3 = 3		
Bring two students up to practice the converse	ation	
Try it again with several other pairs of student	S.	
Then have children find a partner and practice	e the conversation. Do this at least 4 times.	
Remember that today they are only doing the	Fact Family of 3, 3, and 6	
Math Vocabulary		It is important to review
Word for Today: graph		academic math vocabulary
The word graph describes a tool that you can	use in math so you can see and compare	often throughout the day.
different things. For example, graphs might b	e in squares and you could color in the	Complete the Vocabulary
number of squares that would compare to the number that you are representing. So if you		notebook for each word.
had 3 chocolate chip cookies, you would color in 3 squares, one for each cookie.		When possible, have
Have children complete the Vocabulary noteb	ook.	students experience the
		word. (Ex. 4 students
Vocabulary Notebook Sample:		creating a right angle,
New Word	My Description	multiple students acting out
		an equation.)
Graph	A graphic or picture that tells a story about	Vocabulary Notebooks can
	the information you have	be made from 1/2 of a
Describer	Due to	composition book.
Personal Connection	Drawing	
Vectorday, we graphed the number of		
resterualy we graphed the number of		
people who waik nome		
	V veget Groups	
ACTIVITY Clear the Deck		Focus on having young
Ulear the Deck		small groups. Once a game
table. Ask for children to voluntoer to learn how to play the game. Begin with 2 children		is mastered you can utilize it
table. Ask for children to volunteer to learn now to play the game. Begin with 2 children.		in the "Mhen Homework Is
Unce you have laught 2, have each of them leach 1 other student while everyone IS watching. Repeat one more time so that you now have 4 children teaching 4 other children		Complete" center
When you start to play the name out the 8 wh	now have a children teaching a other children.	complete conter.
	is internet to play the game with o who do	



not and you can observe the final four play. Materials:

Game cards

Directions:

- 1. Shuffle the cards and divide them equally between two players
- 2. Each person should place his/her 16 cards in a row on his "deck"
- 3. First player turns over one of his/her cards. Person tells the missing number. If he/she is correct, then the card is cleared from the deck and set aside. If child can not name the missing number, he/she turns the number back over and loses his/her turn
- 4. Winner is first student who clear the deck first

	Closing
	Review
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do ma	ath?
Let's make a graph about the number of people who prefe	er Oreos, Chips Ahoy, and Animal Crackers

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Clear the Deck Cards

5 6	13 15	21 23	3 5
25 27	7 9	1820	3335
9 11	1416	31 33	17 19
1 3	28 30	41 43	11 13
10 12	15 17	2123	3436
30 32	24 26	44 46	2931
4042	3840	2729	35 37
48 50	36 38	3941	4345



Component:	Math
Grade Level:	First Grade
Lesson Title:	Circle the Sum #1
Focus:	Addition

Materials:	
White boards	Circle the Sum game board
Crayolas	Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is another way of telling you to add?

What is a Fact Family? If you are adding the number 4 and 3 together, what is the fact family of three numbers? What is a sum?

What does equals mean? How does the = sign connect the numbers of a Fact Family.

Content (the "Meat")		
Problem of the Day Sue is thinking of a number. That number comes between 14 and 16. What is the	*Activity → Teachable Moment(s) <i>throughout</i>	
Sue is thinking of a number. That number comes between 14 and 16. What is the number? 14 16 Have students draw this problem on the white board. Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	Moment(s) throughout During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



Today you will introduce this activity and begin Have students write the entire Fact Family on 3 + 5 = 8 5 + 3 = 8 8 - 3 = 5 8 - 5 = 3 Bring two students up to practice the conversa Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the		
Math Vocabulary Word for today: between The word for today is between. Yesterday we played a game that demonstrated the word "between". In the game, Clear the Deck, you had to find the number that came "between" the two numbers on the card. Between is another way of saying in the middle of. When we make a peanut butter and jelly sandwich, the peanut butter and the jelly are between two slices of bread. In this case there are two things between. If we were to make a sandwich with mayonnaise, mustard, turkey lettuce and cheese between 2 slices of bread, we would have 5 things between. On the board draw 2 squares at least 2 feet apart. Ask for a student volunteer to come up and draw one thing between the squares. Repeat until you have several items between the squares. Have children complete the vocabulary notebook for the word between. Vocabulary Notebook Sample: New Word My Description		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word. (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book.
between Personal Connection	In the middle Drawing	
The sun is in the middle of the 2 happy faces.		
Activity Circle the Sum Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Materials: Game Board Vis-à-vis pens Sock or other eraser Players: 1 Purpose of the game: Practice addition facts Directions: Practice addition facts	S	



1.	Each child is given a game board inside a sheet protector, a vis-à-vis pen and a sock or other eraser.	
2.	Child is given a target number (maybe 10, 9, 11, etc.)	
3.	Child circles as many combinations of numbers as he/she can to find a sum that is equal to the target number.	
4.	Game is over when time is called.	

C	losing	
R	eview	
Say:		
Please recap what we did today.		
Did we achieve our objectives?		
Debrief		
What did you like about what we did today in math?		
What would you like to do more of the next time we do math?		
What was something that you did today that you can use in school tomorrow?		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Circle the Sum Game Board

4	3	1	8	2	4	6	7
0	5	2	3	1	4	2	3
5	1	0	6	6	7	3	2
1	4	3	2	1	1	4	1
5	0	3	4	2	7	6	1
3	4	6	1	2	0	8	4
5	2	2	0	4	3	2	3
6	2	1	7	3	2	6	2
5	1	2	4	8	0	2	3



Component:	Math
Grade Level:	First Grade
Lesson Title:	Circle The Sum #2
Focus:	Addition

Materials:	
White boards	Dice
Crayolas	Socks

Opening
State the objective
Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.
Gain prior knowledge by asking students the following questions
What is another way of telling you to add?
What is a Fact Family? If you are adding the number 2 and 4 together, what is the fact family of three numbers?
What is a sum?
What does equals mean? How does the = sign connect the numbers of a Fact Family.

Content (the "Meat")	
Problem of the Day There are two rectangles below. Each one has triangles in it. Which rectangle has the	*Activity → Teachable Moment(s) <i>throughout</i>
fewest number of triangles?	During the lesson check in with students repeatedly.
Have students draw this problem on the white board.	Check in about what is happening and what they are
Fact Practice	thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one	l ake advantage of any teachable moments.
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



correct recoonse		
Contect response.	n with the East Eamily of 2, 6 and 0	
Have students write the entire East Family on	the white board	
3 + 6 = 0		
5 + 0 = 7 6 + 3 = 0		
0 + 3 - 9 0 2 - 6		
9 - 3 = 0 0 6 - 2		
9 - 0 = 3 Bring two students up to practice the converse	ation	
Try it again with soveral other pairs of student		
Then have children find a partner and practice	s. The conversation . Do this at least 4 times	
Demember that today they are only doing the	Fine conversation. Do this at least 4 times.	
Talk shout how we will continue with the four	Fall Falling 01.3, 0 and 9.	
Talk about now we will continue with the rout	problems in the family even though two	
problems look exactly the same.		
Math Vo	cabulary	It is important to review
Word for today: between		academic main vocabulary
Review the discussion that you had about the	word between yesterday. Have students	
think about their favorite sandwich. Have the	m share with a peer the items that would	Complete the Vocabulary
come between the bread.		notebook for each word.
Have students review vesterday's vocabulary	entry with the same person and add or	When possible, have
change anything that makes sense to them to	do	students experience the
Vocabulary Notebook Sample:		word. (Ex. 4 students
New Word	My Description	creating a right angle,
		multiple students acting out
hatwaan	In the middle	an equation.)
Detween		Vocabulary Notebooks can
		be made from ½ of a
Personal Connection	Drawing	composition book.
The circle is between the triangle and the		
square.		
Act	ivity	Focus on having young
Circle t	he Sum	people "compete" in pairs or
		small groups. Once a game
Review how to play the game with the studen	ts. When you are sure that they are clear on	is mastered you can utilize it
how to play the game, have them pick a partn	er to play the game with. Give them a	in the "When Homework Is
different target number today and ask them to	play the game with a different partner.	Complete" center.
Materials: Game Board		
Vis-à-vis pens		
Sock or other eraser		
Players: 1		
Purpose of the game: Practice addition facts	S	
Directions:		
1 Each child is given a game board insi	de a sheet protector, a vis à vis pen and a	
Each child is given a game board inside a sneet protector, a vis-a-vis pen and a sock or other erasor		
2. Unlid is given a target number.		
3. Child circles as many combinations of	r numbers as he/she can to find a sum that is	



equal to the target number.

4. Game is over when time is called.

Closing		
Review		
Say:		
Please recap what we did today.		
Did we achieve our objectives?		
Debrief		
What did you like about what we did today in math?		
What would you like to do more of the next time we do math?		
What does it mean to put things between?		
Demonstrate a space between your hands.		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Student Activity Choice
Focus:	Review

Materials:

White boards Crayolas

Socks

supplies for all of the games you have taught the students

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Tell the difference between adding and subtracting.

Tell the difference between plus and minus.

Will you have a sum in an addition or a subtraction problem?

Will you have a difference in an addition or a subtraction problem?

Content (the "Meat")

Problem of the Day

What is the sum of 24 and 31? Write the answer in both numbers and words. Have students draw this problem on the white board.

Fact Practice

Fact Practice for 1^{st} grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3

1 + 2 = 32 + 1 = 3

2 + 1 = 33 - 2 = 1

3 - 2 = 13 - 1 = 2

After they have written the problem in all 4 ways they will find a partner and say, "If 1 + 2 = 3, then 2 + 1 = 3".

The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

Check in about what is happening and what they are thinking.

Take advantage of any teachable moments.

Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of

the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 4, 5 and 9. Have students write the entire Fact Family on the white board. 4 + 5 = 9 5 + 4 = 9 9 - 4 = 5 9 - 5 = 4 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 4, 5 and 9.	
Math Vocabulary	It is important to review
Words for today: tens, count, between, graph, ones, Review all of the words that students have worked with for the past 11 days. Ask students to share the vocabulary notebook. Ask them to demonstrate the word. Have students share the notebook with a peer. Check for understanding.	academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Activity	Focus on having young
Student Choice	people "compete" in pairs or small groups. Once a game
You have taught the students several games: Roll and Compare, Beat the Dice, Circle the Sum, Clear the Deck, and Put Them in Order (as well as games from last month).	is mastered you can utilize it in the "When Homework Is Complete" center
Review how you play each of the games and then invite the students to select the game that they would like to play today.	Complete Center.
Have students pair up with one another to play the games. After about 10 minutes, invite them to switch both partners and games. Do not insist that they do this, simply give them the opportunity to make another choice.	
Be sure that you have all of the supplies you need for them to play all of the games.	



Closing		
Review		
Say:		
Please recap what we did today.		
Did we achieve our objectives?		
Debrief		
What did you like about what we did today in math?		
What would you like to do more of the next time we do math?		
What are some of the ways that you can compare numbers?		
For what reason it is important that you can read and write numbers in order?		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Calendar
Focus:	Calendar

Materials:

White boards

Crayolas

Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What have you learned this week that helps you make more sense out of math?

Share with your friend the Fact Families that you have been studying?

Content (the "Meat")	
Problem of the Day Complete this list of numbers:	*Activity → Teachable Moment(s) <i>throughout</i>
5, 10, 15,,,, 45, 50	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say	student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



correct response. Today you will introduce this activity and b Have students write the entire Fact Family 4 + 7 = 11 7 + 4 = 11 11 - 4 = 7 11 - 7 = 4 Bring two students up to practice the conver- Try it again with several other pairs of stud Then have children find a partner and practice		
Remember that today they are only doing		
Math Word for today: pattern Pattern is a word that describes a way that themselves. For example, the American fl can be found in plaid, wallpaper, and in the where a pattern makes sense. Create an entry in your Vocabulary Notebo word pattern.	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).	
Vocabulary Notebook Sample:	Vocabulary Notebooks can be made from ½ of a	
New Word	My Description	composition book.
pattern		
Personal Connection	Drawing	
I made a pattern out of the blocks.	❸ ❸ ❸ ☆☆♥ ❸ ❸ ⊕ ☆☆♥ ❸	
Calendar Materials: • Calendar template attached to this lesson Directions: 1. Students will work independently. 2. Give each student a calendar grid. 3. Student should label the days of the wee 4. Student should label the name of the mo 5. Student should insert the date onto the c 6. Student add pictures to identify special d	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	



	Closing			
	Review			
Say:				
Please recap what we did today.				
 Did we achieve our objectives? 				
	Debrief			
What did you like about what we did today in math?				
What do you know about a calendar?				
What are the names of the month?				
What are the names of the days of the week?				

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Calendar Template

Name of Month

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		



Component:	Math
Grade Level:	First Grade
Lesson Title:	Cereal Sort
Focus:	Attributes

Materials:	
White boards	small cup
Crayolas	Lucky Charms
Socks	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing). Sometimes you count forward or backward by 1s, other times for 2s, 3s, 4s, or many more. That's why addition and subtraction were invented so you didn't have to spend so much time counting. It is simply easier once you get the hang of it.

What do you know about addition?

What is a Fact Family? If you are adding the number 6 and 8 together, what is the fact family of three numbers? What is a sum?

In the Fact Family 6, 4, and 10 what is the sum?

	Content (the "Meat")						
Problem of the Day Look at the graph below. How many people like happy faces? How many more people like					*Activity → Teachable Moment(s) <i>throughout</i>		
happy faces than musical notes?					During the lesson check in with students repeatedly.		
	∀	♥	♥	0	0		Check in about what is
	ິງ 		0	0	0		thinking.
1 2 3 4 5					Take advantage of any		
Fact Practice						teachable moments.	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one					Stop the class and focus on a student's key learning or		
another in adding and subtracting. Fact practice will follow this pattern every day.					understanding. Ask open-		
They will write the problem in four ways.				determine what the rest of			
	1	+ 2 = 3	•		2		the group is thinking.



2 + 1 = 3 $3 - 2 = 1$ $3 - 1 = 2$ After they have written the problem in all 4 way "If 1 + 2 = 3, then 2 + 1 = 3". The other student will respond with "Yes, and You should have them practice this conversati students every day. On the 5 th day, you will ut the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begin Have students write the entire Fact Family on 1 + 8 = 9 8 + 1 = 9 9 - 1 = 8 9 - 8 = 1 Bring two students up to practice the conversa Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the Math Vor	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
Word for Today: graph The word graph describes a tool that you can different things. For example, graphs might be number of squares that would compare to the had 3 chocolate chip cookies, you would color Look at the graph. It shows how children vote When you look at the chart, which shape is the When you look at the chart, which shape is the Have children complete the Vocabulary notebook Vocabulary Notebook Sample:	academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.	
New Word		
graph		
Personal Connection I can graph the number of cars that are blue.	Drawing	



Students will complete this notebook for each vocabulary word that they are given.	
Activity Cereal Sort Materials: Cups (2 oz.) Lucky Charms (maybe 2 boxes)	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Directions:	·
1. Give each pair of students a cup of Lucky Charms.	
 Ask students to work together to sort the Lucky Charms into categories (color, shapes, cereal vs. marshmallow). 	
3. Have students draw a graph to show the sort that they have made and share it with the class.	
4. Let students eat the Lucky Charms when you are finished.	

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

Name something that we could graph.

If you were graphing something that began with a value of 4 and then moved to a value of 9, would the graph show more or less?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.


Component:	Math
Grade Level:	First Grade
Lesson Title:	How Many
Focus:	Estimation

Materials:

White boards Crayolas Socks assorted cereals cups

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is another way of telling you to add?

What is a Fact Family? If you are adding the number 4 and 3 together, what is the fact family of three numbers? What is a sum?

What does equals mean? How does the = sign connect the numbers of a Fact Family.

Content (the "Meat")		
Problem of the Day If a $\mathbf{v} = 5$ and a $\mathbf{J} = 3$, how much do you have if you have this number sentence:	*Activity → Teachable Moment(s) <i>throughout</i>	
♥ + ♪ =	During the lesson check in with students repeatedly.	
Fact Practice	Check in about what is happening and what they are	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	thinking.	
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.	
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



the conversation will follow the pattern, but the		
through his/her cards (of course we hope they	remember without looking) and gives the	
correct response.		
I oday you will introduce this activity and begin	n with the Fact Family of 2, 8 and 10.	
Have students write the entire Fact Family on	the white board.	
2 + 8 = 10		
8 + 2 = 10		
10 - 2 = 8		
10 - 8 = 2		
Bring two students up to practice the conversa	ition.	
Iry it again with several other pairs of students	S.	
I hen have children find a partner and practice	the conversation. Do this at least 4 times.	
Remember that today they are only doing the	Fact Family of 2, 8 and 10.	
Math Vo	cabulary	It is important to review
Word for today: how many?		academic math vocabulary
How many is a question asked when you wan	to know a total. Write a number sentence	often throughout the day.
for this story: Shelly has 8 marbles. John give	es her 7 marbles. How many marbles does	Complete the Vocabulary
Shelly have now?		notebook for each word.
Ask students to give you another problem Illu	istrate it on the heard and then create a	When possible, have
number sentence		students experience the word
	all fair the account is a true and	(Ex. 4 students creating a
Have children complete the vocabulary noted	ook for the word between.	right angle, multiple students
Vocabulary Notebook Sample:	M. D	acting out an equation).
New Word	My Description	Vocabulary Notebooks can
		be made from ½ of a
How many	Ask the question about quantity, total	composition book
	number	
Personal Connection	Drawing	
He asked me how many sweaters I had.	•7	
, i i i i i i i i i i i i i i i i i i i		
	8	
Acti	vity	Focus on having young
How many?		people "compete" in pairs or
Materials:	small groups. Once a game	
• 2 ounce cups	is mastered you can utilize it	
Cheerios		In the "When Homework Is
Rice Criex		Complete" center.
• IIIX		
Directions		
1 Have students work in pairs		
 Have students work in pairs. Students should make a guess as to how many piece of each coreal it will take to fill. 		
2. Students should make a guess as to how many piece of each cereal it will take to fill		
the 2 ounce cup.		



3.	Students should write the estimate on the white board, being sure to label the cereal	
	type.	
4.	Once students have estimated the number of pieces of each cereal, students should	
	get 1 cup of each type of cereal and count the pieces.	
5.	Students should write a comparison statement: My guess, Actual Number	
	for each type of cereal.	

Closing
Review
Say:
Please recap what we did today.
Did we achieve our objectives?
Debrief
What did you like about what we did today in math?
What does the term "how many" mean?
What operation (addition or subtraction) do you do to answer the question, "How many?"

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Cereal Word Problems
Focus:	Review

Materials:	
White boards	Trix
Crayolas	Cocoa Puffs
Socks	Rice Chex

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you like best about working with numbers?

What does it mean to estimate?

What is a coin?

What is a number sentence?

Content (the "Meat")	
Problem of the Day This is Fred's domino. Write a	*Activity → Teachable Moment(s) <i>throughout</i>
number sentence that tells how many dots on the domino.	During the lesson check in with students repeatedly.
•	Check in about what is happening and what they are thinking.
Fact Practice	Take advantage of any teachable moments.
Fact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
3-2=1 3-1=2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3-1=2$, and $3-2=1$ ".	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



You should have them practice this conversation students every day. On the 5 th day, you will us the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begin Have students write the entire Fact Family on 4 + 8 = 12 8 + 4 = 12 12 - 4 = 8 12 - 8 = 4 Bring two students up to practice the conversation Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the		
Remember that today they are only doing the Fact Family of 4, 8 and 12. Math Vocabulary Words for today: domino A domino is a game piece that has dots or spots on it. A domino is divided into two sides and sometimes you can have a domino that only has spots on one side or the other. Sometimes there are dots on both sides. The most common dominos have from double 0 to double 6 sets of spots. You play dominos by matching the spots. Another kind of dominos are called Double Nines which means the spots go from double zero to double 9. Create an entry for the word domino in your Vocabulary Notebook. Word adomino My Description Rectangular game piece with dots on it Personal Connection Drawing I like to use the dominoes to add. Drawing		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Activity Cereal Word Problems Materials		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



all of the cereal for every problem.

4. Students should write at least 10 number sentences.

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

Tell how you think you would play the game of dominos.

Tell why it is important to understand how to write a number sentence?

Tell what the common U.S. coins are named and how much they are worth.

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	How Long?
Focus:	Estimation

Materials:	
White boards	paper clips
Crayolas	strings
Socks	scissors

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtracting?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem.

Content (the "Meat")		
Problem of the Day	*Activity > Teachable	
I am the answer to the number sentence	Moment(s) throughout	
5 + 2 = What number am I?	During the lesson check in with students repeatedly.	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.	
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.	
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-ended questions to	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$ then $2 + 1 = 3$ "	determine what the rest of the group is thinking.	
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



Today you will introduce this activity and beg Have students write the entire Fact Family on 3 + 8 = 11 8 + 3 = 11 11 - 3 = 8 11 - 8 = 3 Bring two students up to practice the convers Try it again with several other pairs of studen Then have children find a partner and practice Remember that today they are only doing the		
Math Vo	ocabulary	It is important to review
Word for Today: estimate Estimate is to make a great guess about how many things you think there are in any identified space. Ask students to talk about things that would make sense to estimate rather than count, since there are so many of them. (beans, fish in a pond, glasses of water in a five gallon bottle. Have children review the Vocabulary Notebook.		often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students
New Word	My Description	acting out an equation).
estimate	Make a guess based on information gathered	Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection I estimate the answer to be 352 jelly beans.	Drawing	
Activity How Long? Materials Paper clips Strings(students to cut to different lengths) Scissors White board Crayolas		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 Directions: Have students work in pairs Each pair comes up and cut 6 different strings of different lengths. Student pick up a handful of paper clips. Students "string" the paper clips together to use as a tool to measure. Looking at each piece of string, students estimate how many paper clips long the string is. 		



- 6. Students record the number and then actually measure the string against the paper clips.
- 7. Students determine how close the estimation was.
- 8. Students share results with one another.

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What does it mean to measure something?

If you didn't use paper clips to measure something, what else might you do?

How many paper clips tall are you? What's your best guess?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	M and M Graph
Focus:	Graphing

Materials:

White boards Crayolas Socks M and M small packages

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Give an example of a subtraction problem.

Why is the difference lower than the first number in a subtraction problem?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem.

Content (the "Meat")	
Problem of the Day What would you call the shape below?	*Activity → Teachable Moment(s) <i>throughout</i>
	During the lesson check in with students repeatedly.
Fact Practice Fact Practice Fact Practice for 1st grade is looking at number families, so you are looking at both addition	Check in about what is happening and what they are thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 4, 6 and 10 Have students write the entire Fact Family on the white board. 4 + 6 = 10 6 + 4 = 10 10 - 4 = 6 10 - 6 = 4 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times	
Fact Family of 3, 9 and 12.	
Math Vocabulary Word for Today: cube Cube is a word that describes a shape that has 6 equal sides. It is a three dimensional figure. It is made up of a faces that are squares but a cube is not flat like a square. Think of things that you see in the world which are shaped like a cube. Have children complete the Vocabulary notebook. Vocabulary Notebook Sample: New Word My Description cube Hot dogs, mustard, catsup, drinks, ball	
Drawing	composition book.
Activity M and M Graph Materials: • Small bag of M and Ms for each pair of students • Graph paper (attached to this lesson plan) • Crayons Directions: 1. Students work in pairs. 2. Students create a graph to show how many of each color of M and M is in the bag. 3. Students prepare the graph (demonstrate how to color in the squares). 4. Students share the individual graphs with the class. 5. Create a class graph combining all of the M and Ms	
	remember without looking) and gives the n with the Fact Family of 4, 6 and 10 the white board. ation. s. the conversation. Do this at least 4 times. Fact Family of 3, 9 and 12. cabulary s 6 equal sides. It is a three dimensional es but a cube is not flat like a square. Think haped like a cube. ook. My Description Hot dogs, mustard, catsup, drinks, ball games, family fun at the park Drawing vity ents of each color of M and M is in the bag. w to color in the squares). e class. and Ms.

Closing



	Review
Say:	
 Please recap what we did today. 	
• Did we achieve our objectives?	
	Debrief
What did you like about what we did today in math?	
What is a cube?	
How many sides does a cube have?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Penny Graph
Focus:	Graph

Materials:

White boards Crayolas Socks penny graph

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtracting?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem..

Content (the "Meat")	
Problem of the Day Mark has a card with the number sentence	*Activity → Teachable Moment(s) <i>throughout</i>
3 + 4 = on it. Judy has a card with the number sentence 4 + 7 = on it. Who has a card with the greatest sum? How do you know?	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	Check in about what is happening and what they are thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



correct response. Today you will introduce this activity and begin with the Fact Family of 3, 9 and 12 Have students write the entire Fact Family on the white board. 3 + 9 = 12 9 + 3 = 12 12 - 3 = 9 12 - 9 = 3 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 3, 8 and 11.		
Math Vocabulary Word for Today: number sentence A number sentence is a math problem that is written to tell or capture a story. For example, if the story is this: Judy has 3 dolls. She is given 5 dolls. How many dolls does Judy have? Would be written in a number sentence that looks like this: $3 + 5 = 8$ Have children create an entry in the Vocabulary notebook for the term number sentence. Vocabulary Notebook Sample: New Word My Description Number sentence A sentence in numbers that shares information		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a
Personal Connection 18 onions and 17 olives equals 35 items.	Drawing	composition book.
Activity Penny Graph Materials: Make a copy of the Penny graph for each pair of students (graph at end of lesson plan) 1 penny for each pair of students Directions: 1. Explain to the students what is meant by "heads" and "tails". 2. Tell students that they are going to "toss" the coin and let it land on either "heads" or "tails". 3. Once the coin has landed, students will record whether or not it landed on heads or tails. 4. Pair should toss the coin 10 times. 5. Do the entire activity with the students and then let them begin to work in pairs.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

What is a number sentence?

Turn to your partner and give them a number sentence that tells how old you are if your ages are combined.

Are they the same?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Penny Graph





Component:	Math
Grade Level:	First Grade
Lesson Title:	Make A Dollar
Focus:	Money

Materials:

White boards Crayolas

Socks

decks of cards with face cards and jokers removed

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing). Sometimes you count forward or backward by 1s, other times for 2s, 3s, 4s, or many more. That's why addition and subtraction were invented so you didn't have to spend so much time counting. It is simply easier once you get the hang of it.

What is a Fact Family? If you are adding the number 7 and 6 together, what is the fact family of three numbers? What is a sum?

What is another way of telling you to add?

Write a number sentence for the Fact Family 7, 6 and 13. Circle the sum.

Content (the "Meat")	
Problem of the Day If you have pennies and nickels how can you make 10¢?	*Activity → Teachable Moment(s) <i>throughout</i>
Nickel = 5¢	During the lesson check in with students repeatedly.
Penny = 1¢	Check in about what is happening and what they are
Fact Practice	thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.



3-1=2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response		When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
Today you will introduce this activity and begin with the Fact Family of 1, 9 and 10. Have students write the entire Fact Family on the white board. 1 + 9 = 10 9 + 1 = 10 10 - 1 = 9 10 - 9 = 1		
Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Eact Family of 1, 9 and 10		
Remember that today they are only doing the Fact Family of 1, 9 and 10. Math Vocabulary Word for Today: coin The word coin refers to any metal circle which has been stamped with official symbols. In America, a coin can usually be a penny, a nickel, a dime, a quarter, and a 50¢ piece. A coin is received when someone needs to make change because the amount needed is not a dollar. Think about how each of these coins looks. Which is the largest, which the smallest? Which ones appear to be silver, which one is copper? Complete an entry for coin in your Vocabulary Notebook. Vocabulary Notebook Sample: New Word My Description A metal piece of money: dime, nickel quarter, penny Personal Connection Drawing Did you put a coin in the box? Correst the theorem stices		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Activity Make A Dollar Materials: • Real or plastic coins (you can also go on line and get pictures of coins and print, however Lakeshore has coins relatively inexpensively and they can be used in a lot of different ways		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is



		Complete" center.
Dire	ections:	complete conten
1.	Place all coins or coin cards in the center, face up.	
2.	Player selects coins to make \$1.00.	
3.	Player writes the equation: \$.25 + \$.10 + \$.10 + \$.05 + \$.50 = \$1.00.	
4.	Coins are returned to the center for the next player to use.	

Closing	
Review	
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
Debrief	
What did you like about what we did today in math?	
How can you use the information from today in school tomorrow?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Graphing Coins
Focus:	Graphing

Materials:	
White boards	jar of real or plastic coins
Crayolas	white paper
Socks	Pencils

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is a coin?

How many pennies does it take to make \$1.00

Content (the "Meat")	
Problem of the Day Explain how the shapes below are alike and how they are different.	*Activity → Teachable Moment(s) <i>throughout</i>
$ \land \land$	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	happening and what they are thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	



Today you will introduce this activity and be	gin with the Fact Family of 3, 7 and 10.	
Have students write the entire Fact Family of $2 + 7 = 10$	n the white board.	
3 + 7 = 10 7 + 3 - 10		
10 - 3 = 7		
10 - 7 = 3		
Bring two students up to practice the converse Try it again with several other pairs of studer	sation. hts.	
Then have children find a partner and practic	e the conversation. Do this at least 4 times.	
Remember that today they are only doing the	e Fact Family of 3, 6 and 9.	
I alk about now we will continue with the four	problems in the family even though two	
problems look exactly the same.	and the	
Math V	ocabulary	It is important to review
Word for today: estimate		academic main vocabulary
Estimate is a word that means to make a be	st guess. If you estimate something you make	
a very intentional decision about how many	you think can be in the group that you are	Complete the Vocabulary
estimating. For example, if you reach into th	e candy jar for jelly beans and you bring out a	
handful and have 25 jelly beans, and if you v	vere to guess the entire jar looks like it holds 4	When possible, have
handfuls of jelly beans, you would estimate that there are 100 jelly beans in the jar. That is		Students experience the word
a guess that would make sense so it is a goo		(EX. 4 Students creating a
Create an entry in your Vocabulary Notebook for the word estimate.		acting out an equation)
		Vocabulary Notebooks can
Vocabulary Notebook Sample:	My Decoription	be made from ½ of a
New Word	My Description	composition book.
estimate	Making a guess based on information	
	gathered	
Personal Connection	Drawing	
I estimate that it is 500 miles from here.	500 miles	
Ac	tivity	Focus on having young
Graphing Coins		people "compete" in pairs or
Materials:		small groups. Once a game
• Paper		is mastered you can utilize it
Pencil Jar of coinc (nonnice, dimes, nickels, quart		In the "When Homework Is
• Jai of courts (permiles, unnes, mickels, qualt		
Directions:		
1. Students work in pairs and trace around on	e another's hand (student should create two	
hands).		
2. After the hands are draw, student reaches	nto the container of coins and pulls out a handful.	
 He/she then counts the number of each coin that he/she has drawn from the container. 		



|--|

- 5. Students put the coins back in the jar and then prepare a graph of the coins that were drawn out.
- 6. Students share the graph with the class.

Clos	sing
Rev	iew
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
Deb	rief
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
Name the different coins that we use.	
How do you make a guess about how many steps to the coun	ter?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Raisin Bran 2 Scoops
Focus:	Estimation

Materials:	
White boards	Raising Bran
Crayolas	2 ounce cups
Socks	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

How many fingers do you have on your right hand? How many fingers do you have on your left hand? How many fingers do you have altogether? Did you add or did you count? When you increase a number it is addition. How many fingers do you have on 2 hands. If you take the fingers on one hand away and hide them behind your back, how many fingers do you have showing? Did you count backwards? Did you subtract? Subtraction is what you do when you decrease a number. Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing)

Content (the "Meat")	
Problem of the Day	*Activity → Teachable
You are that aquarium to see the fish. There are 6 clown fish. 3 more clown fish swim into	Moment(s) <i>throughout</i>
the aquarium. How many clown fish all together? Please draw a picture.	During the lesson check in with students repeatedly.
Fact Practice	Check in about what is
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	happening and what they are
and subtraction. The key is for children to learn that numbers have a relationship with one	thinking.
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments
They will write the problem in four ways.	Stop the class and focus on a
1 + 2 = 3	student's key learning or
2 + 1 = 3	understanding. Ask open-
3 - 2 = 1	ended questions to
3 - 1 = 2	determine what the rest of
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	the group is thinking
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	When possible, engage
You should have them practice this conversation (exactly as it is written) with 3-5 other	students in a "teach to learn"
students every day. On the 5 th day, you will utilize all 4 problems from the days before, and	opportunity and have the



the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 1, 6 and 7. Have students write the entire Fact Family on the white board. 1 + 6 = 7 6 + 1 = 7 7 - 1 = 6 7 - 6 = 1 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 1, 6, and 7.		student become the teacher
Math Vocabulary Word for Today: addition Addition is the word that describes what you do when you put 2 or more groups of items together. For example if I have a group of 3 hearts and I have another group of 5 hearts, when I add them together I have a larger group of 8 hearts. Have children complete the Vocabulary notebook. Vocabulary Notebook Sample:		It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students
New Word addition	My Description Totaling two or more things together	acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
Personal Connection I can add the number of cookies on the two plates. Students will complete this notebook for ea	Drawing 3 + 2 = 5 ach vocabulary word that they are given.	
Raisin Bran—2 Scoops Materials: • Raising Bran • 2 ounce paper cups • Post-Its • Bowls • Paper Towels	Activity	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center
Directions:1. Show the children the box of Raising Bra the box. Write each estimate on a Post-I	n and ask them how many raisins they think are in t. When all are done, organize the list from smallest	



to largest.

- 2. Divide students into pairs
- 3. Each pair comes up and puts "two scoops" (cups) of raisin bran in his/her bowl
- 4. Children then go back to their space and count the number of raisins in their sample
- 5. Write the amount on chart paper
- 6. Help children add the numbers
- 7. Check to see how close the estimates were.
- 8. Eat the raisin bran

Closing
Review
Say:
Please recap what we did today.
Did we achieve our objectives?
Debrief
What did you like about what we did today in math?
What would you like to do more of the next time we do math?
What does it mean when we say we found an answer by addition?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Two Scoops Part 2
Focus:	Measurement

Materials:	
White boards	raisins
Crayolas	2 ounce cups
Socks	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition?

What is a Fact Family? If you are adding the number 5 and 3 together, what is the fact family of three numbers? Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing). Sometimes you count forward or backward by 1s, other times for 2s, 3s, 4s, or many more. That's why addition and subtraction were invented so you didn't have to spend so much time counting. It is simply easier once you get the hang of it.

Content (the "Meat")	
Problem of the Day If this month is December, what was last month? What is next month? How do you know?	*Activity → Teachable Moment(s) <i>throughout</i>
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	During the lesson check in with students repeatedly. Check in about what is happening and what they are
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Take advantage of any teachable moments.
1 + 2 = 3 $2 + 1 = 3$ $3 - 2 = 1$ $3 - 1 = 2$ After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The attraction to the problem in all 4 ways they find a partner and say,	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look	When possible, engage students in a "teach to learn" opportunity and have the



· · · ·		
through his/her cards (of course we hope they	student become the teacher.	
correct response.		
I oday you will introduce this activity and begin Have students write the entire Eact Family on		
1 + 7 = 8	the white board.	
7 + 1 = 8		
8 - 1 = 7 when you touched the in betw	een part of your knuckles	
8 – 7 = 1		
Bring two students up to practice the conversa	ation.	
Try it again with several other pairs of student	S.	
Then have children find a partner and practice	e the conversation. Do this at least 4 times.	
Remember that today they are only doing the	Fact Family of 1, 7 and 8	
Math Vo	cabulary	It is important to review
Word for Today: month	-	academic math vocabulary
A month is a period of time that is measured in	n days. There are twelve months each year.	often throughout the day.
Some of the months have 30 days. Some mo	onths have 31 days. One month has 28 days	Complete the Vocabulary
except for every four years it has 29 days.		notebook for each word.
The months of the year are January, Februar	ry, March, April, May, June, July, August,	When possible, have
September, October, November, December	f	students experience the word
If you put your fists out in front of you and you	start on the knuckle of the smallest finger of	(Ex. 4 students creating a
vour left hand, and say the months of the year	r as you touch the knuckle, then the space in	right angle, multiple students
between the knuckle, the knuckle, the space k	between the knuckle and so on, you will say	acting out an equation).
January, February, March, April, May, June, J	uly (you will be at the end of your left hand).	Vocabulary Notebooks can
You will begin August when you touch the knu	ickle on your right hand. September is the	be made from ½ of a
space, October the knuckle, November the sp	ace, and December the knuckle. Now you	composition book.
might wonder why that makes a difference. E	very month you said when you touched a	
knuckle has 31 days. February has 38 or 29 d	dependent on the year. April, June,	
September, and November all have 30 days.	These were the months you named	
In your Vocabulary Notebook create an entry	for the word month.	
Vocabulary Notobook Sample:		
New Word	My Description	
Month	Measurement of time: January, May	
Personal Connection	Drawing	
	rimin	
There are 12 months in the tear.		
Students will complete this notebook for each	vocabulary word that they are given.	



Activity	Focus on having young
Raisins—Two Scoops Part II	people "compete" in pairs or
Materials:	small groups. Once a game
Chart from yesterday	is mastered you can utilize it
 Box of raisins (probably several—2 ounces for each student) 	in the "When Homework Is Complete" center.
Directions:	
1. Discuss with students that the advertisement says that there are "two scoops" of raisins in	
every box.	
2. Talk about that instead of a scoop we are using the cup.	
3. Have students measure two small cups of raisins and count them.	
4. Is the number the same, higher, lower that yesterday's number?	
5. Decide if the advertisement is correct.	

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math? What would you like to do more of the next time we do math? What month were you born in? What special events happen in February?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Beans and Cups #1
Focus:	Addition

Materials:	
White boards	pinto beans, pink beans, lima beans
Crayolas	2 ounce cups
Socks	dice

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing)

Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students give you in both a horizontal (5 + 4 = 9) and vertical manner 5

+4 9

Content (the "Meat")	
Problem of the Day John and Jorge share chocolate Hershey kisses. They have six Kisses. If they both get the same number, how many will each get? Draw a picture to show your answer.	*Activity → Teachable Moment(s) <i>throughout</i>
Fact Practice	with students repeatedly.
subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3	Take advantage of any teachable moments
2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	ended questions to determine what the rest of the group is
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students	When possible, engage



every day. On the 5 th day, you will utilize al conversation will follow the pattern, but the his/her cards (of course we hope they reme response. Today you will introduce this activity and be Have students write the entire Fact Family of 4 + 9 = 13 9 + 4 = 13 13 - 4 = 9 13 - 9 = 4 Bring two students up to practice the conve Try it again with several other pairs of stude Then have children find a partner and pract Remember that today they are only doing the	students in a "teach to learn" opportunity and have the student become the teacher	
Math Word for Today: addend Description: Addend is the term we use to are adding together. If we look at the math the numbers 4 and 9 are the addends. The equal 13. In a problem that looks like this: which in this case would be 9. Have children complete the Vocabulary not Vocabulary Notebook Sample: New Word addend Personal Connection What are the addends in the number sentence 6 + 4 = 10? Students will complete this notebook for ear	h Vocabulary name the numbers in an addition problem that we fact family for today, $4 + 9 = 13$ and also $9 + 4 = 13$, y are the two numbers that we are combining to $4 + \Box = 13$, the box represents the missing addend, ebook. My Description addends are the numbers you add together in an addition problem Drawing Chart 4 = 100 Chart 4 = 1000 Chart 4 =	It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
Beans and Cups Materials: dry pinto beans, dry lima beans bean in the baggie—6-7 of each kind of bea Directions: 1. Divide students into pairs 2. Give each pair a baggie of beans and 3. Player #1 rolls both dice 4. Player uses one type of bean to represe	Activity and dry pink beans, baggies (place some of each an), 2 6-sided dice. a pair of dice sent one of the dice and another type of bean to	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center



represent the number of the other dice

- 5. Player draws the different types of beans to represent the number sentence with the total or sum at the end.
- 6. Turn moves to Player #2 who follows the same procedure.
- 7. After each player has created 10 number sentences, the activity is over.

Closing Review Say: • Please recap what we did today. • Did we achieve our objectives? • Did we achieve our objectives? Debrief What did you like about what we did today in math? What would you like to do more of the next time we do math? What does it mean when we say we found an answer by addition? Wat does it mean when we say we found an answer by addition?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them



Component:	Math
Grade Level:	First Grade
Lesson Title:	Beans and Cups #2
Focus:	Addition

Materials:	
White boards	pinto beans, pink beans, lima beans
Crayolas	2 ounce cups
Socks	dice

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing) Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students

give you in both a horizontal (6 + 5 = 11) and vertical manner

6 <u>+5</u> 11

Content (the "Meat")	
Problem of the Day Maria has 3 kittens. Her mother gives her 2 more kittens. When her dad comes home he	*Activity → Teachable Moment(s) <i>throughout</i>
brings her 3 more kittens. How many kittens does Maria have altogether? Draw a picture of your answer.	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-ended questions to
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	determine what the rest of the group is thinking.



The other student will respond with "Yes, an You should have them practice this convers students every day. On the 5 th day, you will the conversation will follow the pattern, but the through his/her cards (of course we hope the correct response. Today you will introduce this activity and be Have students write the entire Fact Family of 4 + 10 = 14 10 + 4 = 14 14 - 4 = 10 14 - 10 = 4 Bring two students up to practice the conver Try it again with several other pairs of stude Then have children find a partner and practice Remember that today they are only doing the	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
Math V	/ocabulary	It is important to review
Word for Today: addend Description: Addend is the term we use to we are adding together. If we look at the ma + 4 = 14, the numbers 4 and 10 are the add combining to equal 14. In a problem that loo missing addend, which in this case would be some have missing addends, in others have problems. In your Vocabulary Notebook review the ent sure that it captures your understanding of t Vocabulary Notebook Sample: New Word addend	often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.	
Personal Connection	Drawing	
What is the sum of 9 + 2? Students will complete this notebook for eac	9 +2 11 h vocabulary word that they are given.	
Activity Beans and Cups Materials: dry pinto beans, dry lima beans and dry pink beans, baggies (place some of each bean in the baggie—6-7 of each kind of bean), 2 6-sided dice.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

Directions:

- 1. Review the game that students played yesterday.
- 2. Have students share how to play the game.
- 3. Have students play the game with new partners today.

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math? What would you like to do more of the next time we do math? What is a number? What is a letter? Are they the same?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.





Component:	Math
Grade Level:	First Grade
Lesson Title:	Adding With Toothpicks #1
Focus:	Addition
Lesson Title: Focus:	Adding With Toothpicks #1 Addition

Materials:		
White boards	decks of cards with face cards and jokers removed	
Crayolas	toothpicks, cups	
Socks	glue sticks	8" square construction paper

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State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing)

Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students give you in both a horizontal (17 - 8 = 9) and vertical manner

17 <u>-8</u> 9

Content (the "Meat")	
Problem of the Day Look at the list of numbers below. Two of the numbers are missing. What do you think will	*Activity → Teachable Moment(s) <i>throughout</i>
fill in the blanks correctly? How do you know?	During the lesson check in with students repeatedly.
10, 12,, 16,, 20, 22	Check in about what is happening and what they are
Fact Practice	thinking.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments.
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of



3-2=1 3-1=2 After they have written the problem in all 4 wa "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and You should have them practice this conversat students every day. On the 5 th day, you will u the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begi Have students write the entire Fact Family on 5 + 6 = 11 6 + 5 = 11 11 - 5 = 6 11 - 6 = 5 Bring two students up to practice the conversat Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the Math Vo Word for Today: cylinder	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
Cylinder is the term we use to describe something that looks like an oatmeal box. The base and top of a cylinder is a circle and the edges of the cylinder are shaped by the base and the top, creating a shape without corners and sharp edges coming together in a 90° angle. Cylinders do not have corners. Ask students to identify other cylinders (cans of food, ice cream cartons, drums, salt and pepper shakers, etc.) Talk with students about how to draw a cylinder, beginning with the circle that is flat for the top Followed by the straight edges that are connected to a curving bottom which is really the only piece of the circle that you can see. Also, if you shade the cylinder on one side and leave the other side clear, it helps the look or the cylinder. Complete an entry for coin in your Vocabulary Notebook. Vocabulary Notebook Sample: New Word Cylinder My Description Cans, glasses, trash cans		often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection I drank the tea out of a cylinder. Students will complete this notebook for each	Drawing	


Activity Adding With Toothpicks	Focus on having young people "compete" in pairs or small groups. Once a game
Materials: 8" construction paper (dark color), flat toothpicks, small cup, glue stick, crayons, deck of cards with face cards and jokers removed.	is mastered you can utilize it in the "When Homework Is Complete" center.
Directions:	
1. Review the game that students played yesterday.	
2. Have students share how they did this activity yesterday.	
3. Have students work with new partners today.	

Closing
Review
ay:
Please recap what we did today.
Did we achieve our objectives?
Debrief
/hat did you like about what we did today in math?
ow can you use the information from today in school tomorrow?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Adding With Toothpicks #2
Focus:	Addition

Materials:		
White boards	small cup	deck of cards without jokers and face cards
Crayolas	tooth picks	8" square construction paper (dark color)
Socks	glue sticks	

Opening		
State the objective		
Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.		
Gain prior knowledge by asking students the following questions		
What do you know about addition? What do you know about subtraction?		
Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing)		
Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which can be written = in a horizontal problem, and (the underline) in a vertical problem. Write the problems students give you in both a horizontal $(13 - 6 = 7)$ and vertical manner		
13		
<u>-6</u>		
7		

Content (the "Meat")	
Problem of the Day Look at the two shapes below. How are they alike?	*Activity → Teachable Moment(s) <i>throughout</i>
	During the lesson check in with students repeatedly.
	Check in about what is happening and what they are thinking.
Fact Practice	Take advantage of any teachable moments.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.



3-2=1 3-1=2 After they have written the problem in all 4 wa "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and You should have them practice this conversat students every day. On the 5 th day, you will u the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begi Have students write the entire Fact Family on 5 + 5 = 10 10 - 5 = 5 Bring two students up to practice the conversat Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the students that this fact is a double—the addence	ys they will find a partner and say, since that is true, 3 – 1 = 2, and 3 – 2 = 1". ion (exactly as it is written) with 3-5 other tilize all 4 problems from the days before, and e second responder will need to quickly look remember without looking) and gives the n with the Fact Family of 5, 5, and 10 the white board. ation. s. e the conversation. Do this at least 4 times. Fact Family of 5, 5, and 10. Share with ds are the same.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
Math Vo Word for Today: cylinder Cylinder is the term we use to describe somet and top of a cylinder is a circle and the edges the top, creating a shape without corners and Cylinders do not have corners. Ask students cream cartons, drums, salt and pepper shake Have children complete the Vocabulary noteb Vocabulary Notebook Sample: New Word Cylinder Personal Connection I will drink the milk from a cylinder.	cabulary hing that looks like an oatmeal box. The base of the cylinder are shaped by the base and sharp edges coming together in a 90° angle. to identify other cylinders (cans of food, ice rs, etc.) ook. My Description a glass, a can, a garbage can, a vase are all cylinders Drawing	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Students will complete this notebook for each	vocabulary word that they are given.	



Activity Adding With Toothpicks	Focus on having young people "compete" in pairs or
Materials: 8" construction paper (dark color), flat toothpicks, small cup, glue stick, crayons, deck of cards with face cards and jokers removed.	is mastered you can utilize it in the "When Homework Is Complete" center.
Directions:	
1. Group students in pairs.	
2. Give each pair 2 pieces of construction paper, a cup of toothpicks, a glue stick and a deck of cards.	
 Player #1 draws two cards from the deck and using toothpicks creates a number sentence (4 + 5 = 9) if the player rolls a 4 and a 5. 	
4. Player #1 says the number sentence aloud.	
5. Player #2 takes his/her turn, repeating the same procedure.	
6. After each player has drawn 8 pairs or cards, when he/she draw the 9 th set, he/she	
makes the problem and glues the toothpicks to the construction paper.	

Closing
Review
Say:
Please recap what we did today.
Did we achieve our objectives?
Debrief
What did you like about what we did today in math?
What would you like to do more of the next time we do math?
What is a cylinder?
Where can you see them in the world?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them (Aha!)



Grade Level: First Grade	
Lesson Title: Marshmallow Shapes #1	
Focus: Geometry	

Materials:	
White boards	small marshmallows
Crayolas	cups
Socks	8" construction paper square

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing)

Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students give you in both a horizontal (17 - 8 = 9) and vertical manner

17 <u>-8</u> 9

Content (the "Meat")	
Problem of the Day Look at the squares below. Which one is divided into equal parts? How do you know?	*Activity → Teachable Moment(s) <i>throughout</i>
	During the lesson check in with students repeatedly.
	Check in about what is happening and what they are thinking.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking



3 - 1 = 2 After they have written the problem in all 4 way "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and You should have them practice this conversatis students every day. On the 5 th day, you will ut the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begin Have students write the entire Fact Family on 5 + 7 = 12 7 + 5 = 12 12 - 5 = 7 12 - 7 = 5 Bring two students up to practice the conversa Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the Math Vor Word for today: equal Equal is the math term that means the same v different but the numbers represented are the or $5 + 4$ or $9 + 0$, or $2 + 7$, and then a lot of suf written horizontally like this =, and vertically it you have drawn the equal sign, you are saying same value as what is written on the other sid Have children complete the vocabulary notebo Vocabulary Notebook Sample: New Word I have two piggy banks with the same amount of money in them. They are equal.	ys they will find a partner and say, since that is true, 3 – 1 = 2, and 3 – 2 = 1". on (exactly as it is written) with 3-5 other ilize all 4 problems from the days before, and e second responder will need to quickly look remember without looking) and gives the n with the Fact Family of 5, 7, and 12. the white board. tion. S. the conversation. Do this at least 4 times. Fact Family of 5, 7, and 12. cabulary alue. If something is equal, it may look same. 3 + 6 is the same value as 9 or 1 + 8, otraction problems. The equal sign can be is a line like this In math, when g what is written on one side with have the e. bok for the word equal. My Description things that are the same Drawing	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher
amount of money in them. They are equal.		
Activity Marshmallow Shapes Materials: small marshmallows, flat toothpicks, small cups, 8" piece of construction paper for each student Directions:		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center



1. Group students in pairs

- 2. Give each pair of students a small cup of toothpicks and a second cup of marshmallows
- 3. Discuss how to make different shapes using marshmallows and toothpicks
- 4. Instruct students to make a square, a triangle, a rectangle, and a hexagon—stop sign.
- 5. Ask them to display the shape on the construction paper
- 6. When student has made each of the requested shapes, ask him/her to create a shape of his/her choosing.

	Closing
	Review
Say:	
• Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of next time?	
What are the different shapes that you made with the ma	rshmallows and toothpicks
Where can you find those shapes in the world?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them (Aha!)



Component	Math
Grade Level:	First Grade
Lesson Title:	Marshmallow Shapes #2
Focus:	Geometry

Materials:	
White boards	toothpicks and small cups
Crayolas	small marshmallows
Socks	pencils

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing) Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students

give you in both a horizontal (17 - 8 = 9) and vertical manner

17 <u>-8</u> 9

Content (the "Meat")	
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>
2 + 2 = 4 is a double fact . Write 3 more double facts.	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say,	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking



"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and a You should have them practice this conversati students every day. On the 5 th day, you will ut the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begin Have students write the entire Fact Family on 5 5 + 8 = 13 8 + 5 = 13 13 - 5 = 8 13 - 8 = 5 Bring two students up to practice the conversa Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the final formula to the formula to the formula to the final formula to the f	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher	
Math Voo	cabulary	It is important to review
Word for today: equal Equal is the math term that means the same value. If something is equal, it may look different but the numbers represented are the same. 3 + 6 is the same value as 9 or 1 + 8, or 5 + 4 or 9 + 0, or 2 + 7, and then a lot of subtraction problems. The equal sign can be written horizontally like this =, and vertically it is a line like this In math, when you have drawn the equal sign, you are saying what is written on one side with have the same value as what is written on the other side. Have students provide you with number sentences that have equal values on both sides of the equals sign. Write problems both horizontally and vertically. Create an entry in your Vocabulary Notebook for the word estimate.		academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
New Word	My Description	
equal	means the same, two or more things are the same	
Personal Connection	Drawing	
9 is the same as 3 + 6. They are equal.		
Acti Marshmallow Shapes Materials: small marshmallows, flat toothpick for each student	vity s, small cups, 8″ piece of construction paper	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it



Directions:	in the "When Homework Is	
 Review the activity that students did yesterday. 	Complete" center	
2. Have students share how to the activity was done.		
3. Have students complete the activity with a new partner today.		
4. Give students more time to explore the different shapes that they can make and then		
make a picture of those different shapes on the construction paper square.		
Closing		
Review		

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief What did you like about what we did today in math? What would you like to do more of the next time we do math?

What are the different shapes that you made with the marshmallows and toothpicks

Where can you find those shapes in the world?

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them (Aha!)



Component:	Math
Grade Level:	First Grade
Lesson Title:	Circle A Sum #1
Focus:	Addition

Materials:

White boards Crayolas

Socks

Circle A Sum #2 (laminate or place in sheet protector for future use

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtracting? What do you know about addition?

In a Fact Family how does the arrangement of the numbers change when you subtract? How does it change when you add?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem? In an addition problem?

.Content (the "Meat") Problem of the Day *Activity \rightarrow Teachable There are nine girls and ten boys in Room 23. If there are 20 coat hooks in the room, are Moment(s) throughout there enough hooks for everybody's coat? During the lesson check in with students repeatedly. Fact Practice Check in about what is Fact Practice for 1st grade is looking at number families, so you are looking at both addition happening and what they are and subtraction. The key is for children to learn that numbers have a relationship with one thinking. another in adding and subtracting. Fact practice will follow this pattern every day. Take advantage of any Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) teachable moments. They will write the problem in four ways. Stop the class and focus on a 1 + 2 = 3student's key learning or 2 + 1 = 3understanding. Ask open-3 - 2 = 1ended questions to 3 - 1 = 2determine what the rest of After they have written the problem in all 4 ways they will find a partner and say, the group is thinking. "If 1 + 2 = 3, then 2 + 1 = 3". When possible, engage The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". students in a "teach to learn" You should have them practice this conversation (exactly as it is written) with 3-5 other opportunity and have the students every day. On the 5th day, you will utilize all 4 problems from the days before, and student become the teacher. the conversation will follow the pattern, but the second responder will need to quickly look



through his/her cards (of course we hope to correct response. Today you will introduce this activity and to double) Have students write the entire Fact Family 6 + 6 = 12 6 + 6 = 12 12 - 6 = 6 Bring two students up to practice the convective Try it again with several other pairs of stude Then have children find a partner and prace Remember that today they are only doing give you examples of other doubles. Ask	hey remember without looking) and gives the begin with the Fact Family of 6, 6, and 12 (a on the white board. ersation. lents. ctice the conversation. Do this at least 4 times. the Fact Family of 6, 6, and 12. Ask students to students to tell how doubles are different than	
other fact families.		
Math Vocabulary Word for Today: sum Sum is the math term we use to describe the answer we get when we add numbers together. The sum is written on one side of an equals sign while on the other side will be written the numbers that were added or put together to arrive at the sum. A synonym for the word sum is total. Have students give you several problems and identify the sum by that word. Have children review the entry in the Vocabulary notebook for the term sum. Have them share with a friend to be sure that they have captured the meaning. Vocabulary Notebook Sample: New Word My Description sum total in an addition problem Personal Connection Drawing What is the sum of 5 + 3? Jage 3 (Jage 3		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Activity Circle A Sum Materials: Circle A Sum Sheet #2 (attached to the lesson plan), crayolas Directions: 1. Review the game that students played yesterday. 2. Have students share how to play the game. 3. Have students play the game with new partners today.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Closing
Review
Say:
Please recap what we did today.
Did we achieve our objectives?
Debrief
What did you like about what we did today in math?
What would you like to do more of the next time we do math?
Give an example of how you will use what we did today in school tomorrow.

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them. (Aha!)





Circle A Sum #2

7	1	3	2	8	4	4	6
3	2	5	1	3	4	0	2
2	0	1	6	6	7	5	3
1	3	4	1	2	1	1	4
2	0	1	6	6	7	5	3
1	3	0	2	4	7	5	6
4	6	4	2	1	0	3	8
3	2	2	4	0	3	5	2
3	2	1	8	4	0	5	2



Component:	Math
Grade Level:	First Grade
Lesson Title:	Circle A Sum Practice #2
Focus:	Addition

Materials:

White boards Crayolas

Socks

Circle A Sum Worksheet (laminated or in sheet protector so it can be used again

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtracting?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem.

Content (the "Meat")			
Problem of the Day Draw a picture that shows the number sentence written below:	*Activity → Teachable Moment(s) <i>throughout</i>		
10 - 4 = 6	During the lesson check in with students repeatedly.		
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	Check in about what is happening and what they are thinking.		
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.		
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.		
the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the			



correct response. Today you will introduce this activity and be Have students write the entire Fact Family of 5 + 9 = 14 9 + 5 = 14 14 - 5 = 9 14 - 9 = 5 Bring two students up to practice the convective Try it again with several other pairs of studer Then have children find a partner and practice the convective Remember that today they are only doing the		
Math Vocabulary Math Vocabulary Word for Today: sum Sum is the math term we use to describe the answer we get when we add numbers together. The sum is written on one side of an equals sign while on the other side will be written the numbers that were added or put together to arrive at the sum. A synonym for the word sum is total. Have children create an entry in the Vocabulary Notebook for the word sum. Vocabulary Notebook Sample: New Word My Description the answer when you have an addition problem Personal Connection Drawing		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book.
A Circ	Focus on having young people "compete" in pairs or	
 Materials: Circle A Sum Sheet #1 (attached to the lesson plan), crayolas Directions: Group students in pairs. Taking turns, first one student and then another circles numbers that will add up to 5, 7, or 9. Game is over when all of the possible combinations are found. 		small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



•••	-
Closing	
Review	
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
Debrief	
What did you like about today's lesson?	
How can you use the information from today during class tomorrow?	
What is one key learning you had today in math?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them. (Aha!)



Circle A Sum #1

2	5	3	1	0	8	4	2
1	4	7	3	4	2	8	6
2	0	3	5	4	1	3	2
0	5	2	1	7	6	6	3
6	3	4	4	0	2	1	8
3	1	1	4	1	1	2	4
2	5	3	2	3	4	0	2
3	5	1	0	7	2	4	6
1	6	2	2	2	3	7	6



Component:	Math
Grade Level:	First Grade
Lesson Title:	Math Blast #1
Focus:	Operations

Materials:

White boards Crayolas

Socks

Math Blast Game Board is in a second file. Laminate or put in sheet protector.

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Focus Student's Prior Knowledge

Give an example of an addition or a subtraction problem by writing it on the white board. Share this with a friend and explain, using math vocabulary, what you have written on the white board.

On the white board write an addition and/or a subtraction problem both vertically and horizontally. Tell your partner which sign represents equals.

Content (the "Meat")	
Problem of the Day Look at the problem written below. What number would you put in the \bigcirc to make the	*Activity → Teachable Moment(s) <i>throughout</i>
number sentence correct?	During the lesson check in with students repeatedly.
5 + \varphi = 7	Check in about what is happening and what they are
Fact Practice	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments.
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Stop the class and focus on a student's key learning or understanding. Ask open-
1 + 2 = 3	ended questions to
2 + 1 = 3 3 - 2 = 1	determine what the rest of the group is thinking.
3 – 1 = 2	When possible, engage
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 2$, then $2 + 1 = 2$ "	students in a "teach to learn"
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	opportunity and have the student become the teacher.
students every day. On the 5 th day, you will utilize all 4 problems from the days before, and	



the conversation will follow the pattern, but t through his/her cards (of course we hope the correct response. Today you will introduce this activity and be Have students write the entire Fact Family of 6 + 7 = 13 7 + 6 = 13 13 - 6 = 7 13 - 7 = 6 Bring two students up to practice the conver Try it again with several other pairs of stude Then have children find a partner and practi Remember that today they are only doing the		
Math Vocabulary Word for Today: difference Difference is the math term we use to describe the answer you get when you have subtracted one number from another. It is smaller than the top number, the minuend, unless you are subtracting 0. The difference is identifying how the top number will be different once you have subtracted something. It is letting you know that there is different value. Have children complete the Vocabulary notebook for the word "difference". Vocabulary Notebook Sample: New Word My Description difference The amount left after you have subtracted one number from another Personal Connection Drawing The difference between 10 and 7 is 10 - 7 - 3		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Ad Math Blast! Materials: Math Blast Board (separate file) or colored paper to mark numbers. Directions: 1. Group students in pairs. 2. Player #1 rolls all three dice and adding the uncovered numbers on the Math Bl 3. Player #2 repeats the process. 4. Play is complete when all numbers are Example: Student rolls a 3, 4, and a 5. He he/she could say 4 – 3 + 5 = 6. If 6 is also c	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	



(Closing
	Review
Say:	
Please recap what we did today.Did we achieve our objectives?	
	Debrief
What did you like about what we did today in math?	
What is a cube?	
How many sides does a cube have?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Math Blast #2
Focus:	Operations

Materials:

White boards Crayolas Socks Math Blast Game Board attached

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Give an example of an addition or a subtraction problem by writing it on the white board. Share this with a friend and explain, using math vocabulary, what you have written on the white board.

On the white board write an addition and/or a subtraction problem both vertically and horizontally. Tell your partner which sign represents equals.

Content (the "Meat")	
Problem of the Day There are 8 pairs of shoes in the closet. How many shoes are there altogether? Draw a picture to show your answer.	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1+2=3$ $2+1=3$ $3-2=1$ $3-1=2$	with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



Today you will introduce this activity and here students write the entire Fact Family	pegin with the Fact Family of 6, 8, and 14.	
6 + 8 = 14	on the white board.	
8 + 6 = 14		
14 - 6 = 8		
14 - 8 = 6		
Bring two students up to practice the conv	ersation.	
Try it again with several other pairs of stud	lents.	
Then have children find a partner and practice	ctice the conversation. Do this at least 4 times.	
Remember that today they are only doing	the Fact Family of 6, 8, and 14.	
Math	Vocabulary	It is important to review
Word for today: difference		academic math vocabulary
Difference is the math term we use to des	cribe the answer you get when you have	often throughout the day.
subtracted one number from another. It is	smaller than the top number, the minuend,	Complete the Vocabulary
unless you are subtracting 0. The differer	ce is identifying how the top number will be	notebook for each word.
different once you have subtracted sometl	ning. It is letting you know that there is different	When possible, have
value. Write three subtraction problems o	n your white board. Circle the difference in each	students experience the word
problem.	5	(Ex. 4 students creating a
Review the entry in your Vocabulary Note	book for "difference". Does it demonstrate vour	right angle, multiple students
understanding of the word "difference"?	hare your thoughts with a friend	acting out an equation).
		Vocabulary Notebooks can
Vocabulary Notebook Sample:		be made from $\frac{1}{2}$ of a
		composition book.
New Word	My Description	
difference	What is left over. The answer in a subtraction	
	problem.	
Personal Connection	Drawing	
The difference between 8 – 5 is three.	<u>8 - 3 = 5</u>	
	Minund Subtrahand Difference	
	Minuena Subtranena Difference	
	Activity	Focus on having young
M	Activity ath Blast!	Focus on having young people "compete" in pairs or
Materiale: Math Plact Deard (congrete fil	Activity ath Blast!	Focus on having young people "compete" in pairs or small groups. Once a game
Materials: Math Blast Board (separate file	Activity ath Blast! e), 3 dice for each pair of students, games tokens	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it
Materials: Math Blast Board (separate file or colored paper to mark numbers.	Activity ath Blast! e), 3 dice for each pair of students, games tokens	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center
Materials: Math Blast Board (separate file or colored paper to mark numbers.	Activity ath Blast! e), 3 dice for each pair of students, games tokens	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Materials: Math Blast Board (separate file or colored paper to mark numbers. Directions:	Activity ath Blast! e), 3 dice for each pair of students, games tokens d vesterday	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Materials: Math Blast Board (separate file or colored paper to mark numbers. Directions: 1. Review the game that students playe 2. Have students share how to play the	Activity ath Blast! e), 3 dice for each pair of students, games tokens d yesterday. game	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Materials: Math Blast Board (separate file or colored paper to mark numbers. Directions: 1. Review the game that students playe 2. Have students share how to play the 3. Have students play the game with ne	Activity ath Blast! e), 3 dice for each pair of students, games tokens d yesterday. game. w partners today.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



	Closing
	Review
Say:	
Please recap what we did today.Did we achieve our objectives?	
	Debrief
What did you like about what we did today in math?	
What do you know about a calendar?	
What are the names of the month?	
What are the names of the days of the week?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component:	Math
Grade Level:	First Grade
Lesson Title:	Student Activity Choice
Focus:	Review

Materials:

White boards Crayolas Socks Materials for games played the past 10 days

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you like best about working with numbers?

What does it mean to estimate?

What is a coin?

What is a number sentence?

Problem of the Day Dad barbecued 12 hamburgers. Jill ate 2 and Martin ate 3. How many hamburgers are there left for other people to eat?	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/ber cards (of course we have they remember without looking) and gives the	Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
- חודטטטור חוארוער כמועא דער כטעראל איל חועלי חולא ברווכדוועכר אווחטטר וטטאווער מחט טועכא חוכ	



correct response. Today you will introduce this activity and begin with the Fact Family of 6, 9 and 15. Have students write the entire Fact Family on the white board. 6 + 9 = 15 9 + 6 = 15 15 - 6 = 9 15 - 9 = 6 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 6, 9, and 15.	
Activity Today students will select the game from the week that they most want to play. Pairs can select different games. Game choices are: Beans and Cups Adding With Toothpicks Marshmallow Shapes Circle A Sum Sheet #1 or #2 Math Blast!	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

	Closing
	Review
Say:	
• Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
Which of the games did you enjoy playing the most?	
What about this game is fun for you?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

First Grade Math Blast Game Board

1	2	3	4	5
6				7
8		18		9
10			1	12
13	14	15	16	17



Component	Math
Grade Level:	First Grade
Lesson Title:	Fun Facts
Focus:	Math

Materials:

White boards

Crayolas

Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Give an example of an addition or a subtraction problem by writing it on the white board. Share this with a friend and explain, using math vocabulary, what you have written on the white board.

On the white board write an addition and/or a subtraction problem both vertically and horizontally. Tell your partner which sign represents equals.

Content (the "Meat")			
Problem of the Day Count the happy faces. How did you solve this problem?	*Activity → Teachable Moment(s) <i>throughout</i>		
00 00 00 00 00 00	During the lesson check in with students repeatedly.		
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	happening and what they are thinking. Take advantage of any		
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	teachable moments. Stop the class and focus on a		
1 + 2 = 3 2 + 1 = 3 3 - 2 - 1	student's key learning or understanding. Ask open- ended questions to		
3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say,	determine what the rest of the group is thinking.		
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	students in a "teach to learn" opportunity and have the student become the teacher.		



Today you will introduce this activity and begin Have students write the entire Fact Family on the 10 + 10 = 20 10 + 10 = 20 20 - 10 = 10 Bring two students up to practice the conversa Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the	
Math Voc Word for today: fact family Description: We have been doing a lot of work numbers that go together in addition and subtr which numbers have which relationships so yo would be 3, 2, and 5; or 6, 7, and 13, as well a Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students
New Word fact family	acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection I know that 3, 4, and 7 are in a fact family.	
Active Fun Facts! This activity was worked on yesterday. Ask strangame that is helpful. Have students share strangairing today.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 Fun Facts! This activity will give students practice solving <u>Directions:</u> Divide students into pairs or trios. Give each pair or trio a deck Fun Fact? C Shuffle cards and place them face down r Player 1 draws a card completes the prote and writes the letter from his/her card unc Player 2 repeats the process. When all cards are turned and answers for 	



	Closing	
	Review	
Say:		
Please recap what we did today.Did we achieve our objectives?		
	Debrief	
What did you like about what we did today in math?		
What do you know about a calendar?		
What are the names of the month?		
What are the names of the days of the week?		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them. (Aha!)

Fun Facts

-

59	18	47	38
<u>+8</u>	<u>+8</u>	<u>+6</u>	<u>+7</u>
26	63	23	46
+6	+7	+7	+9
65	47	54	62
<u>+9</u>	<u>+7</u>	<u>+6</u>	<u>+9</u>
88	58	22	36
<u>+2</u>	<u>+6</u>	<u>+9</u>	<u>+7</u>





67	26	53	45
М	У	С	V
32	70	30	55
i	е	е	k
74	54	60	71
0	I	е	S
90	64	31	43
Μ		u	Ο

Answer Card:

What did the girl say when she saw her birthday cake?





Component	Math
Grade Level:	First Grade
Lesson Title:	Taking the Prize #1
Focus:	Regrouping—Addition

Materials:

White boards Crayolas

Socks

Fun Fact Game Board, Cards, and Answer Card

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Focus Student's Prior Knowledge

Give an example of an addition or a subtraction problem by writing it on the white board. Share this with a friend and explain, using math vocabulary, what you have written on the white board.

On the white board write an addition and/or a subtraction problem both vertically and horizontally. Tell your partner which sign represents equals.

Content (the "Meat")	
Problem of the Day Look at the following number sentences. Tell which one does not belong to the family.	*Activity → Teachable Moment(s) <i>throughout</i>
3 = 2 = 5 5 - 3 = 2 2 + 3 = 5 3 = 3 = 6 5 - 2 = 3	During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments.
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1 + 2 = 3$ $2 + 1 = 3$ $3 - 2 = 1$ $3 - 1 = 2$ After they have written the problem in all 4 ways they will find a partner and say,"If $1 + 2 = 3$, then $2 + 1 = 3$ ".	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



The other student will respond with "Yes, an You should have them practice this convers students every day. On the 5 th day, you will the conversation will follow the pattern, but t through his/her cards (of course we hope the correct response. Today you will introduce this activity and be Have students write the entire Fact Family of 9 + 10 = 19 10 + 9 = 19 19 - 9 = 10 19 - 10 = 9 Bring two students up to practice the conver Try it again with several other pairs of stude Then have children find a partner and practi Remember that today they are only doing the		
Math V	/ocabulary	It is important to review
Word for Today: Jeast	, , , , , , , , , , , , , , , , , , ,	academic math vocabulary
Least is a term that we use to describe a nu	moral that has a value that is less than another	often throughout the day.
numeral For example 7 is less than 9 Sol	if you were asked "Which number is the least 7	Complete the Vocabulary
or 9?" the answer would be 7 because it rep	resents the least value. We can also show	notebook for each word.
least by using the less than symbol <.		When possible, have
Have children complete the Vocabulary note	book for the word "least"	students experience the word
Vocabulary Notebook Sample	(Ex. 4 students creating a	
New Word	My Description	right angle, multiple students
		acting out an equation).
least	the smallest number when you are looking at	Vocabulary Notebooks can
	two or more numbers	composition book.
Personal Connection	Drawing	
Which number is least, 9 or 3?	7 / 10	
Ad	ctivity	Focus on having young
Taking The Prize!	people "compete" in pairs or	
This activity will give students practice solvir	small groups. Once a game	
Directions:	is mastered you can utilize it	
1. Divide students into pairs or trios.	in the "When Homework Is	
2. Give each pair or trio a deck Fun Fact	Complete" center.	
3. Shuffle cards and place them face dow		
4. Player I graws a card completes the player have been been been been been been been be		
5 Diavor 2 ropoats the process		
6 When all cards are turned and answers		



(Closing
	Review
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What is a cube?	
How many sides does a cube have?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them. (Aha!)

Fun Facts

-

59	18	47	38
<u>+8</u>	<u>+8</u>	<u>+6</u>	<u>+7</u>
26	63	23	46
<u>+6</u>	<u>+7</u>	<u>+7</u>	<u>+9</u>
65	47	54	62
<u>+9</u>	<u>+7</u>	<u>+6</u>	<u>+9</u>
88	58	22	36
<u>+2</u>	<u>+6</u>	<u>+9</u>	<u>+7</u>




67	26	53	45
а	t	е	t
32	70	30	55
h	е	W	h
74	54	60	71
Ο	I	е	t
90	64	31	43
h	i	n	g

Answer Card:

What did the boy say when he ate a whole cake?





Component	Math
Grade Level:	First Grade
Lesson Title:	Taking the Prize #1
Focus:	Addition and Subtraction

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Taking the Prize
Socks	Beans or other game tokens

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing) Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which

can be written = in a horizontal problem, and _____ (the underline) in a vertical problem. Write the problems students give you in both a horizontal (17 - 8 = 9) and vertical manner

17 <u>-8</u> 9

Content (the "Meat")	
Problem of the Day You have two nickels. Do you have enough money to buy a piece of candy that costs 10¢?	*Activity → Teachable Moment(s) <i>throughout</i>
Explain your answer.	During the lesson check in
Fact Practice	with students repeatedly.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Take advantage of any teachable moments.
1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	ended questions to determine what the rest of the group is thinking.





You should have them practice this conversal students every day. On the 5 th day, you will a the conversation will follow the pattern, but the	When possible, engage students in a "teach to learn" opportunity and have the	
through his/her cards (of course we hope the	ey remember without looking) and gives the	student become the teacher.
correct response.		
I oday you will introduce this activity and beg	in with the Fact Family of 7, 8 and 15.	
Have students write the entire Fact Family or	n the white board.	
/ + 8 = 15		
8 + / = 15		
15 - 7 = 8		
15 - 8 = 7	adian	
Bring two students up to practice the convers	salion.	
Then have shildren find a norther and practic	IIS.	
Demomber that to dow they are only doing the	E the conversation. Do this at least 4 times.	
Remember that today they are only doing the		
Math Vo	ocabulary	It is important to review
Word for Today: ones		academic math vocabulary
Description: Ones is a term we use to descri	be place value. We only have 10 numerals:	often throughout the day.
0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. We can arrang	e these digits in a variety of ways and the	Complete the Vocabulary
"place" that the digit is in determines its value	e. For example in the number 2, we know that	notebook for each word.
we would have on 2 items. However, in the r	numberal 24, we know that the $2 = 20$, that's	When possible, have
because it is in the 10's place, and we have	4 ones.	students experience the word
		(Ex. 4 students creating a
Complete en entry for eain in your Vecebuler	av Notobook	right angle, multiple students
Complete an entry for coin in your vocabular	y Noledook.	acting out an equation).
Vocabulary Notebook Sample:		Vocabulary Notebooks can
New Word	My Description	be made from $\frac{1}{2}$ of a
		composition book.
ones	now you count when you say 1, 2, 3, 4, and	
	so on; ones place captures this count	
Personal Connection	Drawing	
what number is in the ones place in this		
number 647 ?		
_		
Students will complete this notebook for each	n vocabulary word that they are given.	
Ac	tivity	Focus on having young
Taking	people "compete" in pairs or	
This activity was worked on yesterday. Ask	students what they learned about playing the	small groups. Once a game
game that is helpful. Have students share st	rategies. Ask students to work in a different	is mastered you can utilize it
pairing today		in the "When Homework Is
paining today.		Complete" center.
Taking the Prize!		

CONSULT 4 KIDS

Students in 1 st grade need to practice addition and subtraction facts to automaticity. We				
nave been working on Fact Families. This activity will give students more practice time.				
Taking the Prize				
Directions:				
1. Divide students into pairs.				
2. Give each pair a Taking the Prize Game Board, Taking the Prize Game cards, and				
game tokens (beans, markers, etc. for each student).				
3. Shuffle the cards and place them face down beside the game board.				
4. Player 1 takes the top card, finds the sum or difference, shares the problem with the				
other player and if the answer is correct then he/she places a game token on that				
number on the game board.				
5. If player draws a subtraction problem, he/she may choose to move forward or move				
backward that number of spaces (It could be to the players' advantage to move				
backward if he/she is stuck toward the end of the game).				
6 First playor to land on the "Finish" space wins				

6. First player to land on the "Finish" space wins.

	Closing
	Review
Say:	
Please recap what we did today.	
• Did we achieve our objectives?	
	Debrief
What did you like about what we did today in math?	
How can you use the information from today in school to	morrow?

Reflection (Confirm, Tweak, Aha!)

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them. (Aha!)

1



2	1	6	7	4	7
					2
7	4	2	6	8	1
9					
6	5	2	8	1	4
					2
8	7	2	5	3	6





3	12	1	5
<u>+3</u>	<u>-9</u>	<u>+4</u>	<u>+0</u>
7	2	4	11
<u>-5</u>	<u>+5</u>	<u>+4</u>	<u>-9</u>
2	9	6	10
<u>+2</u>	<u>-8</u>	<u>+2</u>	<u>-8</u>
2	0	6	7
<u>+3</u>	<u>+6</u>	<u>+3</u>	<u>-6</u>
3	5	9	12
<u>+5</u>	<u>+1</u>	<u>-7</u>	<u>-8</u>



6	2	3	7
<u>+1</u>	<u>+0</u>	<u>+4</u>	<u>-3</u>
4	4	1	6
<u>+3</u>	<u>+2</u>	<u>+0</u>	<u>-4</u>



Component	Math
Grade Level:	First Grade
Lesson Title:	Taking the Prize Game #2
Focus:	Addition and Subtraction

Materials:	
White boards	Taking the Prize Game Board and Cards
Crayolas	Beans or other game tokens
Socks	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing) Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which

can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students give you in both a horizontal (13 - 6 = 7) and vertical manner

13 <u>-6</u> 7

Content (the "Meat")	
Problem of the Day I am a shape which has three corners. What am I?	*Activity → Teachable Moment(s) <i>throughout</i>
Fact Practice	During the lesson check in with students repeatedly.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3	Take advantage of any teachable moments.
2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	determine what the rest of the group is thinking.



The other student will respond with "Yes, and You should have them practice this conversat students every day. On the 5 th day, you will u the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begi Have students write the entire Fact Family on 7 + 7 = 14 7 + 7 = 14 14 - 7 = 7 14 - 7 = 7 Bring two students up to practice the conversa Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the students that this fact is a double—the addend	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
Math Vo	cabulary	It is important to review
Wath Vo Word for Today: penny Practice this Penny Chant with the students u them draw 5 pennies. Penny Chant Penny penny	academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have	
Easily spent Copper brown And worth one cent	(Ex. 4 students creating a right angle, multiple students acting out an equation).	
Have children complete the Vocabulary noteb Vocabulary Notebook Sample:	ook.	Vocabulary Notebooks can
New Word	My Description	composition book.
penny	U.S. coin that is valued at 1 cent	
Personal Connection	Drawing	
I had only one penny left after I paid for the candy bar.		
Students will complete this notebook for each		
Act Taking the Prize! Students in 1 st grade need to practice addition have been working on Fact Families. This act	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it	



Tak	ing the Drize	in the "When Homework Is
Iak		complete center.
Dire	ections:	
1.	Divide students into pairs.	
2.	Give each pair a Taking the Prize Game Board, Taking the Prize Game cards, and	
	game tokens (beans, markers, etc. for each student).	
3.	Shuffle the cards and place them face down beside the game board.	
4.	Player 1 takes the top card, finds the sum or difference, shares the problem with the	
	other player and if the answer is correct then he/she places a game token on that	
	number on the game board.	
5.	If player draws a subtraction problem, he/she may choose to move forward or move	
	backward that number of spaces (It could be to the players advantage to move	
	backward if he/she is stuck toward the end of the game).	
6.	First player to land on the "Finish" space wins.	

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math? What would you like to do more of the next time we do math? What is a cylinder? Where can you see them in the world?

Reflection (Confirm, Tweak, Aha!)

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them. (Aha!)

1



2	1	6	7	4	7
					2
7	4	2	6	8	1
9					
6	5	2	8	1	4
					2
8	7	2	5	3	6





4	11	3	1
<u>+</u> 2	- <u>8</u>	<u>+</u> 2	<u>+</u> 4
8	3	5	10
- <u>6</u>	<u>+</u> 4	<u>+</u> 3	- <u>8</u>
2	8	6	10
<u>+2</u>	- <u>7</u>	<u>+2</u>	<u>-8</u>
2	0	6	7
<u>+3</u>	<u>+6</u>	<u>+3</u>	<u>-6</u>
3	5	9	11
<u>+5</u>	<u>+1</u>	<u>-7</u>	- <u>7</u>



6	2	3	7
<u>+1</u>	<u>+0</u>	<u>+4</u>	<u>-3</u>
4	4	1	6
<u>+3</u>	<u>+2</u>	<u>+0</u>	<u>-4</u>



*Activity \rightarrow Teachable

Moment(s) throughout

During the lesson check in with students repeatedly.

student become the teacher.

Component	Math
Grade Level:	First Grade
Lesson Title:	Say What? #1
Focus:	Addition and Subtraction

Materials:

Socks

White boards Cravolas

Say What Game Board, Cards, and Answer Card

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtracting? What do you know about addition?

What are the common coins used in the United States?

What does equals mean? How does the word equal apply when you are writing words by code? Can you give an example of a code?

Content (the "Meat")

Problem of the Day A cat has a mitten on each paw. It has 3 bells tied to its tail. Does that cat have more mittens or bells? How do you know?

Fact Practice

the conversation will follow the pattern, but the second responder will need to guickly look

Check in about what is Fact Practice for 1st grade is looking at number families, so you are looking at both addition happening and what they are and subtraction. The key is for children to learn that numbers have a relationship with one thinking. another in adding and subtracting. Fact practice will follow this pattern every day. Take advantage of any Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) teachable moments. They will write the problem in four ways. Stop the class and focus on a 1 + 2 = 3student's key learning or 2 + 1 = 3understanding. Ask open-3 - 2 = 1ended questions to 3 - 1 = 2determine what the rest of After they have written the problem in all 4 ways they will find a partner and say, the group is thinking. "If 1 + 2 = 3, then 2 + 1 = 3". When possible, engage The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". students in a "teach to learn" You should have them practice this conversation (exactly as it is written) with 3-5 other opportunity and have the students every day. On the 5th day, you will utilize all 4 problems from the days before, and



through his/her cards (of course we hope they correct response. Today you will introduce this activity and begin double) Have students write the entire Fact Family on 9 + 9 = 18 9 + 9 = 18 18 - 9 = 9 18 - 9 = 9 Bring two students up to practice the converse Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the give you examples of other doubles. Ask stud other fact families.		
Math Vocabulary Word for Today: nickel Practice this Nickel Chant with the students. Then have them draw 5 nickels (this equals a quarter—count by 5's) Nickel Chant Nickel, nickel Thick and fat You're worth five cents I know that!		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book
nickel	A coin worth 5 pennies	
Personal Connection	Drawing	
I have a nickel in my pocket.		
Act Say What? (This activity was worked on yesterday. Ask s game that is helpful. Have students share str pairing today. Say What?	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	



This	activity will give students practice solving problems and also creating a message	
Say	What?	
Dire	ctions:	
1.	Divide students into pairs or trios.	
2.	Give each pair or trio a deck of Say What? cards and a Game Board.	
3.	Shuffle cards and place them face down next to the game board.	
4.	Player 1 draws a card completes the problem, locates the answer on the game board	
	and writes the letter from his/her card under the answer.	
5.	Player 2 repeats the process.	
6.	When all cards are turned and answers found, then students will read the Say What	
	message.	

C	0 S	in	g

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

Give an example of how you will use what we did today in school tomorrow.

Reflection (Confirm, Tweak, Aha!)

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Say What?

L	I	Т	Т	L	Е
3	5	7	9	11	13
В	0	Y	В	L	U
2	1	4	6	8	10
Ε					
12					



7	1	5	2
<u>-6</u>	<u>+1</u>	<u>-2</u>	<u>+2</u>
8	4	4	12
<u>-3</u>	<u>+2</u>	<u>+3</u>	<u>-4</u>
3	5	7	4
<u>+6</u>	<u>+5</u>	<u>+4</u>	<u>+8</u>
7 <u>+6</u>			

Answer Card:

3	5	7	9	11	13
2	1	4			
6	8	10	12		



Component	Math
Grade Level:	First Grade
Lesson Title:	Say What? #2
Focus:	Addition and Subtraction

Materials:

White boards

Crayolas

Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about adding? What do you know about subtracting?

In a Fact Family how does the arrangement of the numbers change when you subtract?

What does equals mean? How does the = sign connect the numbers of a Fact Family in a subtraction problem?

Content (the "Meat")	
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>
Is it possible or impossible for there to be green dogs on the street tomorrow? Tell how you know?	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	Check in about what is happening and what they are thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



correct response		
Today you will introduce this activity and beg Have students write the entire Fact Family on		
8 + 9 = 17		
9 + 8= 17		
1/-8=9		
17 - 9 = 0 Bring two students up to practice the convers	ation	
Try it again with several other pairs of student	lS.	
Then have children find a partner and practice	e the conversation. Do this at least 4 times.	
Remember that today they are only doing the	Fact Family of 8, 9, and 17.	
Math Vo	cabulary	It is important to review
Word for Today: quarter	-	academic math vocabulary
Practice this Quarter Chant with the students.	Then have students draw four quarters	often throughout the day.
which is worth \$1.00		Complete the Vocabulary
Quarter Chant		Notebook for each word.
Quarter, guarter		students experience the word
Big and bold		(Ex. 4 students creating a
You're worth twenty-five		right angle, multiple students
I am told.		acting out an equation).
Have children create an entry in the Vocabula	ary Notebook for the word quarter.	Vocabulary Notebooks can
Vocabulary Notobook Samplo:		be made from ½ of a
New Word	My Description	composition book.
quarter	An American coin worth 25 cents	
Personal Connection	Drawing	
I was given a quarter when I lost my tooth.	STATES OF THE	
	City Prop and State	
	TAR US	
Act	ivity	Focus on having young
Say What?	(Like a riddle)	people "compete" in pairs or
This activity will give students practice solving	small groups. Once a game	
Say W/bat2	is mastered you can utilize it	
Directions:	In the "When Homework Is	
1. Divide students into pairs or trios.		
2. Give each pair or trio a deck of Say What		
3. Shuffle cards and place them face down		
4. Player I draws a card completes the pro	blem, locates the answer on the game board	



- 5. Player 2 repeats the process.
- 6. When all cards are turned and answers found, then students will read the Say What message.

	Closing
	Review
Say:	
Please recap what we did today.	
• Did we achieve our objectives?	
	Debrief
What did you like about today's lesson?	
How can you use the information from today during clas	s tomorrow?
What is one key learning you had today in math?	

Reflection (Confirm, Tweak, Aha!)

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Say What?

Н	U	М	Р	Т	Y
3	5	7	9	11	13
D	S	А	0	N	L
2	1	4	6	8	10
W					
12					



7	1	5	2
<u>-6</u>	<u>+1</u>	<u>-2</u>	<u>+2</u>
8	4	4	12
<u>-3</u>	<u>+2</u>	<u>+3</u>	<u>-4</u>
3	5	7	4
<u>+6</u>	<u>+5</u>	<u>+4</u>	<u>+8</u>
7 <u>+6</u>			

Answer Card:

3	5	7	9	11	13
2	5	7	9	11	13
1	4	11		6 8	4
12	4	10	10		



Component	Math
Grade Level:	First Grade
Lesson Title:	Fantastic Fun #1
Focus:	Subtraction

Materials:	
White boards	pinto beans, pink beans, lima beans
Crayolas	Fantastic Fun Game Board
Socks	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing) Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students

give you in both a horizontal (6 + 5 = 11) and vertical manner

6 <u>+5</u> 11

Content (the "Meat")	
Problem of the Day If you have 4 cookies and you want to share them with your best friend so you each have	*Activity → Teachable Moment(s) <i>throughout</i>
the same number, how many will you each have?	During the lesson check in
Fact Practice	with students repeatedly.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Take advantage of any teachable moments.
1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	ended questions to determine what the rest of the group is thinking.



You should have them practice this conversal students every day. On the 5 th day, you will u the conversation will follow the pattern, but th through his/her cards (of course we hope they correct response. Today you will introduce this activity and beg Have students write the entire Fact Family on 6 + 9 = 15 9 + 6 = 15 15 - 6 = 9 15 - 9 = 6 Bring two students up to practice the convers Try it again with several other pairs of student Then have children find a partner and practice	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
Remember that today they are only doing the	Fact Family of 6, 9 and 15.	
Math Vocabulary Word for Today: coins Description: Coins is a term that we use to describe all of the different metal money that there is, including pennies, nickels, dimes, quarters, half dollars, and silver dollars. All of these are coins rather than paper money. Almost every money system in the world has a combination of coins and paper money. In your Vocabulary Notebook create the entry for the word "coins" and with a friend review and be sure that it captures your understanding of the word. Vocabulary Notebook Sample: New Word My Description U.S. coins are pennies, nickels, dimes, and quarters		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection	Drawing	
I have five coins, 2 quarters, 1 nickel, 1 dime, and 1 penny.		
Students will complete this notebook for each		
Act Fantas This activity was worked on yesterday. Ask s game that is helpful. Have students share str pairing today. Fantastic Fun!	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	
have been working on Fact Families. This ac		



Directions:

- 1. Divide students into pairs.
- 2. Give each pair a set of Fantastic Fun cards, a Fantastic Fun Game Board, and game tokens (beans, markers, etc.) for each student.
- 3. Shuffle the cards and place them face down by the game board.
- 4. Player 1 takes the top card, finds the difference, shares the problem with the other player and if the answer is correct, then he/she places a game token on that number on the game board.
- 5. Player 2 repeats the same process.
- 6. Game is over when all of the cards have been drawn.
- 7. Winner is the player with the most markers.

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

What are the names of the coins we use?

How many pennies are there in a dime?

Reflection (Confirm, Tweak, Aha!)

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them. (Aha!)



Fantastic Fun!

8	4	5	4	5	7
					4
6	8	6	5	3	9
9					
11	7	9	9	11	7
					6
9	13	8	10	8	9



18	18	17	17
<u>-9</u>	<u>-5</u>	<u>-9</u>	<u>-7</u>
16	16	15	15
<u>-7</u>	<u>-5</u>	<u>-8</u>	<u>-9</u>
15	14	14	13
<u>-6</u>	<u>-3</u>	<u>-7</u>	<u>-4</u>
13	13	13	12
<u>-5</u>	<u>-7</u>	<u>-8</u>	<u>-9</u>
12	12	11	11
<u>-6</u>	<u>-8</u>	<u>-4</u>	<u>-6</u>



13	12	11	15
<u>-9</u>	<u>-7</u>	<u>-7</u>	<u>-7</u>
16	17	15	20
<u>-8</u>	<u>-8</u>	<u>-7</u>	<u>-10</u>



Component	Math
Grade Level:	First Grade
Lesson Title:	Round 'Em Targets #1
Focus:	Rounding Numbers

Materials:

White boards Crayolas

Socks

Round 'Em Game Board and Cards

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about rounding number?

When you count you can round a number off to the nearest 10. For example if you have 8 items you can round this off and say, "I have about 10 items." If you had 17 items, you can round off and say, "I have about 20 items." However is you have only 13 items, you would want to round off to a lower number and say, "I have about 10 items."

Draw 10 items on the board. Circle the 5th item. Share with students that everything lower than the circle goes down, and beginning with the circled number and up, and the number goes up. Practice several of these with students.

Content (the "Meat")

Problem of the Day

To count from 71 to 74 would you count forward 3 or would you count backward 3? How do you know?

Fact Practice

Fact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.

1	+	2	=	3
2		1		2

- 2 + 1 = 33 - 2 = 1
- 3 2 = 13 - 1 = 2

After they have written the problem in all 4 ways they will find a partner and say, "If 1 + 2 = 3, then 2 + 1 = 3".

The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". You should have them practice this conversation (exactly as it is written) with 3-5 other

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly. Check in about what is

happening and what they are thinking.

Take advantage of any teachable moments.

Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the

student become the teacher.



students every day. On the 5 th day, you will u the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begi Have students write the entire Fact Family on 8 + 8 = 16 8 + 8 = 16 16 - 8 = 8 16 - 8 = 8 Bring two students up to practice the conversa Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the		
Math Vo	cabulary	It is important to review
Word for today: tens		academic math vocabulary
Description: Tens is a term we use to descrivalues the numeral at 10. When we count: 10 the numerals in the 10s place (except of cours understand that it is more than ones. When y same as 10 poppies	Complete the Vocabulary notebook for each word. When possible, have	
Create an entry in your Vocabulary Notebook	for the word tens	(Ex. 4 students creating a
		right angle, multiple students
Vocabulary Notebook Sample:	acting out an equation).	
New Word	My Description	be made from ½ of a
tens	Counting by numbers that are 10 apart	composition book.
Personal Connection	Drawing	
I can count by 10s to 100.	10 20, 30, 40, 50, 60	
Acti Round 'Er This activity was worked on yesterday. Ask st game that is helpful. Have students share stra pairing today.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	
Round 'Em Targets It is important that children learn about roundin effective mental math. The rules for rounding 2, 3, or 4, the number rounds down; and if the is rounded up to the next ten. Round 'Em Targets		

Directions:

- 1. Divide students into pairs.
- 2. Give each group a Round 'Em Target Cards and Game Board.
- 3. Shuffle the cards and place them face down next to the game board.
- 4. Player 1 draws a card and determines if he/she should round the number up or down.
- 5. Once the decision has been made, he/she places the card in the column on the Game Board that indicates the number that the card was rounded to.

Example: the player draws a card that has a 43 on it. The rule would require that the student round down to "40", so he/she would place the card in the column labeled "40"

- 6. Player 2 then takes his/her turn.
- 7. Game is over when all cards have been rounded and placed in columns.

Clos	ing
Revi	iew
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
Debi	rief
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
What is easy about rounding numbers? What is difficult?	

Reflection (Confirm, Tweak, Aha!)

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





Round 'Em Targets

20	30	40	50	60



23	27	29	21	25
34	36	38	31	33
43	49	47	42	48
53	57	59	51	54
17	22	19	18	24
32	33	37	39	35
42	46	41	44	45
52	56	61	64	56



Component	Math
Grade Level:	First Grade
Lesson Title:	Round 'Em Targets #2
Focus:	Rounding Numbers

Materials:

White boards

Crayolas

Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math. We are going to work on rounding numbers.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing)

When we round numbers we either move forward to a number that is slightly more or we move backward to a number that is slightly less. Draw a number line on the board showing the numbers 1-10. Circle the 5. Explain that everything below the 5 goes down and everything 5 and up, goes up. Ask when it would make sense to do this. (Number large)

	Content (the "	Meat")	
Problem of the Day Which of these boxes has the fewest circles?			*Activity → Teachable Moment(s) <i>throughout</i>
			During the lesson check in with students repeatedly. Check in about what is
Fact Practice for 1st g	Fact Pract prade is looking at number far	ice nilies, so you are looking at both addition	happening and what they are thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other			Take advantage of any teachable moments.
			Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
			When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



students every day. On the 5 th day, you will u the conversation will follow the pattern, but th through his/her cards (of course we hope they correct response. Today you will introduce this activity and beg Have students write the entire Fact Family on 7 + 9 = 16 9 = 7 = 16 16 - 7 = 9 16 - 9 = 7 Bring two students up to practice the convers Try it again with several other pairs of studen Then have children find a partner and practice Remember that today they are only doing the		
Math Vo	ocabulary	It is important to review
Word for today: dime Practice this Dime Chant with the students. 1 10s to 100 or \$1.00)	Then have students draw 10 dimes (count by	academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.
Dime Chant		When possible, have
Dime, dime		students experience the word
Little and thin		(Ex. 4 students creating a
l remember		right angle multiple students
You're worth ten.		acting out an equation)
Have children complete the vocabulary noteb	ook for the word equal	
Vacabulary Natabaak Sampla	ook for the word equal.	Vocabulary Notebooks can
	M. Deservation	be made from ½ of a
New Word	My Description	composition book.
dime	A dime has a value of 10 cents or 10 pennies	
Personal Connection	Drawing	
I have a dime in my pocket.		
		Focus on having young
Aci	livity	people "compete" in pairs or
Round 'E	im Targets	small groups. Once a game
		is mastered you can utilize it
It is important that children learn about roundi effective mental math. The rules for rounding 2, 3, or 4, the number round down; and if the rounded up to the pext ten	in the "When Homework Is Complete" center.	
Round 'Em Targets

Directions:

- 1. Divide students into pairs.
- 2. Give each group a Round 'Em Target Cards and Game Board.
- 3. Shuffle the cards and place them face down next to the game board.
- 4. Player 1 draws a card and determines if he/she should round the number up or down.
- 5. Once the decision has been made, he/she places the card in the column on the Game Board that indicates the number that the card was rounded to.

Example: the player draws a card that has a 43 on it. The rule would require that the student round down to "40", so he/she would place the card in the column labeled "40"

- Player 2 then takes his/her turn.
 - 7. Game is over when all cards have been rounded and placed in columns.

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math?

What would you like to do more of next time?

What are the different shapes that you made with the marshmallows and toothpicks.

Where can you find those shapes in the world?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





Round 'Em Targets

20	30	40	50	60



23	27	29	21	25
34	36	38	31	33
43	49	47	42	48
53	57	59	51	54
16	22	19	18	21
32	2 3	3 8	39	35
43	36	41	44	46
51	56	61	64	5 9



Component	Math
Grade Level:	First Grade
Lesson Title:	Fantastic Fun #2
Focus:	Subtraction

Materials:	
White boards	Fantastic Fun Game Board and Cards
Crayolas	Beans or other markers
Socks	

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Obc	I III IQ

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction?

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing) Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students give you in both a horizontal (5 + 4 = 9) and vertical manner

5 +4 9

Content (the "Meat")	
Problem of the Day Write a number sentence to explain the following picture. How did you know what to write?	*Activity → Teachable Moment(s) <i>throughout</i>
	During the lesson check in with students repeatedly.
	Check in about what is
Fact Practice	thinking.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Stop the class and focus on a student's key learning or
1 + 2 = 3	understanding. Ask open-
2 + 1 = 3 3 - 2 = 1	determine what the rest of
3 – 1 = 2	the group is thinking.



After they have written the problem in all 4 wa "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and You should have them practice this conversat students every day. On the 5 th day, you will u the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begin Have students write the entire Fact Family on 6 + 8 = 14 14 - 6 = 8 14 - 8 = 6 Bring two students up to practice the conversa Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the	ys they will find a partner and say, since that is true, 3 – 1 = 2, and 3 – 2 = 1". ion (exactly as it is written) with 3-5 other tilize all 4 problems from the days before, and e second responder will need to quickly look or remember without looking) and gives the n with the Fact Family of 6, 8 and 14. the white board.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
Math Vo Word for Today: cent Description: The term cent is used to descril with the value of one cent or 1¢ or 1 penny. A at 5 pennies, while a dime or 10¢ is valued at Have children complete the Vocabulary noteb Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students	
New Word	My Description	acting out an equation).
cent	cent is a word that describes the value of coins	be made from ½ of a composition book.
Personal Connection	Drawing	
I have 38¢1 quarter, 1 dime and 3 pennies.		
Students will complete this notebook for each	vocabulary word that they are given.	
Act Fantas Students in 1 st grade need to practice additior have been working on Fact Families. This ac Fantastic Fun! Directions:	ivity tic Fun! and subtraction facts to automaticity. We tivity will give students more practice time.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



- 1. Divide students into pairs.
- 2. Give each pair a set of Fantastic Fun cards, a Fantastic Fun Game Board, and game token (beans, markers, etc.) for each student.
- 3. Shuffle the cards and place them face down by the game board.
- 4. Player 1 takes the top card, finds difference, shares the problem with the other player and if the answer is correct, then he/she places a game token on that number on the game board.
- 5. Player 2 repeats the same process.
- 6. Game is over when all of the cards have been drawn.
- 7. Winner is the player with the most markers.

	Closing
	Review
Say:	
Please recap what we did today.Did we achieve our objectives?	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do m	ath?
What does it mean when we say we found an answer by	addition?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them. (Aha!)



Fanta	astic Fun!					
	8	4	5	4	5	7
						4
	6	8	6	5	3	9
	9					
	11	7	9	9	11	7
						6
	9	13	8	10	8	9



18	18	17	17
<u>-9</u>	<u>-5</u>	<u>-9</u>	<u>-7</u>
16	16	15	15
<u>-7</u>	<u>-5</u>	<u>-8</u>	<u>-9</u>
15	14	14	13
<u>-6</u>	<u>-3</u>	<u>-7</u>	<u>-4</u>
13	13	13	12
<u>-5</u>	<u>-7</u>	<u>-8</u>	<u>-9</u>
12	12	11	11
<u>-6</u>	<u>-8</u>	<u>-4</u>	<u>-6</u>



13	12	11	15
<u>-9</u>	<u>-7</u>	<u>-7</u>	<u>-7</u>
16	17	15	20
<u>-8</u>	<u>-8</u>	<u>-7</u>	<u>-10</u>



Grade Level: First Grade	
Lesson Title: Student Activity Choice	
Focus: Review	

Materials:

White boards Crayolas

Socks

Materials for games played the past 10 days

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you like best about working with numbers?

What does it mean to estimate?

What is a coin?

What is a number sentence?

Content (the "Meat")	
Problem of the Day What number is missing from this number sentence that will make it correct?	*Activity → Teachable Moment(s) <i>throughout</i>
What number is missing from this number sentence that will make it correct? $7 - __ = 5$ Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 $2 + 1 = 3$ $3 - 2 = 1$ $3 - 1 = 2$ After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	Moment(s) throughout During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn"
You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	students in a "teach to learn" opportunity and have the student become the teacher.



I oday you will introduce this activity and begin with the Fact Family of 6, 9 and 15.	
Have students write the entire Fact Family on the white board.	
6 + 9 = 15	
9 + 6 - 15	
10 - 0 = 9	
15 - 9 = 6	
Bring two students up to practice the conversation.	
Try it again with several other pairs of students.	
Then have children find a nartner and practice the conversation. Do this at least 4 times	
Domomber that today they are only doing the East Eamily of 6, 0, and 15	
Remember that today they are only doing the Fact Family of 0, 9, and 15	
Activity	Focus on having young
Activity Choice of 5 activities	Focus on having young people "compete" in pairs or
Activity Choice of 5 activities	Focus on having young people "compete" in pairs or small groups Once a game
Activity Choice of 5 activities Over the past 11 days students have played 5 different games. Give students an	Focus on having young people "compete" in pairs or small groups. Once a game
Activity Choice of 5 activities Over the past 11 days students have played 5 different games. Give students an opportunity to play one of these games.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it
Activity Choice of 5 activities Over the past 11 days students have played 5 different games. Give students an opportunity to play one of these games.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is
Activity Choice of 5 activities Over the past 11 days students have played 5 different games. Give students an opportunity to play one of these games. Fantastic Fun	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Activity Choice of 5 activities Over the past 11 days students have played 5 different games. Give students an opportunity to play one of these games. Fantastic Fun Taking the Prize	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Activity Choice of 5 activities Over the past 11 days students have played 5 different games. Give students an opportunity to play one of these games. Fantastic Fun Taking the Prize	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Activity Choice of 5 activities Over the past 11 days students have played 5 different games. Give students an opportunity to play one of these games. Fantastic Fun Taking the Prize Round 'em Targets	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Activity Choice of 5 activities Over the past 11 days students have played 5 different games. Give students an opportunity to play one of these games. Fantastic Fun Taking the Prize Round 'em Targets Say What?	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Activity Choice of 5 activities Over the past 11 days students have played 5 different games. Give students an opportunity to play one of these games. Fantastic Fun Taking the Prize Round 'em Targets Say What? Fun Facts!	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

	Closing
	Review
Say:	
• Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
Which of the games did you enjoy playing the most?	
What about this game is fun for you?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them. (Aha!)



Component	Math
Grade Level:	First Grade
Lesson Title:	Telling Time to the Hour #1
Focus:	Telling Time

Materials:	
White boards	Fantastic Fun Game Board and Cards
Crayolas	Beans or other markers
Socks	Activity at end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about telling time? What are some of the ways that we measure time? Is a season a measurement of time? What are the seasons? Do we measure time in months? What are the names of the months? What about days? What are the names of the days? We also measure in weeks. Weeks are how many days long? How about hours? How many in a day? How about minutes? How many minutes in an hour?

We need to track time and there are many different ways that we can do that.

Content (the "Meat")		
Problem of the Day Write the following numbers in order from the largest to the smallest. Tell how you know	*Activity → Teachable Moment(s) <i>throughout</i>	
the order is correct. 23, 7, 10, 32, 13	During the lesson check in with students repeatedly.	
	Check in about what is	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	happening and what they are thinking.	
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments	
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	When possible, engage students in a "teach to learn" opportunity and have the	



You should have them practice this converse students every day. On the 5 th day, you will the conversation will follow the pattern, but t through his/her cards (of course we hope the correct response. Today you will introduce this activity and beg Have students write the entire Fact Family of 6 + 8 = 14 8 + 6 = 14 14 - 6 = 8 14 - 8 = 6 Bring two students up to practice the conver Try it again with several other pairs of stude Then have children find a partner and practic Remember that today they are only doing the	student become the teacher	
Math V	ocabulary	It is important to review
Word for Today: clock	-	academic math vocabulary
 Description: The term clock is a word that describes a way we keep track of hours and minutes. A clock can be an analog clock. These are clock that we can often see on walls and are usually round and have then numbers 1-12 on them. They have two moving hands as well. A clock is too big to wear. Have children complete the Vocabulary notebook. A clock that you can wear is called a watch. Ask children questions about what a clock looks like. If there is a clock in the room, have them look at it. Vocabulary Notebook Sample: 		Often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a
New Word	My Description	composition book
picnic	Hot dogs, mustard, catsup, drinks, ball games, family fun at the park	
Personal Connection	Drawing	
I love to go to the park with my family. We take a picnic lunch and barbeque hot dogs. Students will complete this notebook for eac	h vocabulary word that they are given.	
	4	France and h
Ad The focus for the next 4 days will be telling t	ctivity ime both to the hour and the ½ hour. Telling	Focus on naving young people "compete" in pairs or



time with both a digital and analog (this is with a clock face) clocks.	small groups. Once a game
Draw a sirely on the white board and a restangle. Ask the students what they have seen	is mastered you can utilize it
that comes in the shape of both a circle and a rectangle. List several of their suggestions	Complete" conter
Tall them that clocks come in these two shapes. Tall them that a circle clock shows the	Complete Center
time by using two bands, a short hand to point to the bour and a long hand to point to the	
minutes. Tell the children that this is called analog time (they may easily remember this	
word since it is unusual) Draw the circle and ask children about the numbers that they see	
on a clock face. Point to the face of a clock in the classroom if there is one. Show children	
how to write the numbers on the clock.	
Step #1: Place the 12 and the 6 on the top and the bottom of the circle.	
Step #2: Place the 3 and the 9 across from each other, 1/2 way between the 12 and	
the 6.	
Step #3: Numbers 1 and 2 are placed between the 12 and 3	
Step #4: Numbers 4 and 5 placed between the 3 and 6	
Step #5: Numbers 7 and 8 placed between the 6 and the 9	
Step #6: Numbers 10 and 1 placed between the 9 and the 12	
Have children draw several circles and practice this with them. Go through the process	
each ume. Toll thom that the other way we tell time is on a digital cleck which is usually shaped like a	
rectangle. Tell them that a digital clock show the time the way that you would write time	
Show them a digital clock face by drawing a rectangle on the board or chart paper.	
Put the in the center of the rectangle. Explain to children that this symbol "." is used to	
separate the hour from the minutes. If the time is 1:00 it is written in that wav—the hour is	
one and the minutes are 0.	
Have students practice writing the time on the digital clock. Have children draw a rectangle	
and place a : in the center.	
Practice writing different hours, have the minutes be either zero or 30 minutes.	
Today's activity is to make an analog clock out of a paper plate or a circle.	
Work through the process of writing the numbers on the plate or the circle in the same way	
that you did at the beginning	
I Ising a brad, attach the clock hands to the clock face	
Using a brad, attach the block hands to the block labe.	

		Closing
		Review
Say:		
•	Please recap what we did today.	
•	Did we achieve our objectives?	



Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

What does it mean when we say we found an answer by addition?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them



1st Grade Clock Hands





1st Grade Digital Clocks





Component	Math
Grade Level:	First Grade
Lesson Title:	Telling Time to the Hour #2
Focus:	Telling Time

Materials:	
White boards	pinto beans, pink beans, lima beans
Crayolas	Fantastic Fun Game Board
Socks	Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about telling time? What are some of the ways that we measure time? Is a season a measurement of time? What are the seasons? Do we measure time in months? What are the names of the months? What about days? What are the names of the days? We also measure in weeks. Weeks are how many days long? How about hours? How many in a day? How about minutes? How many minutes in an hour?

We need to track time and there are many different ways that we can do that.

Content (the "Meat")

Problem of the Day	*Activity → Teachable	
Jorge has 4 nickels. Does she have enough to purchase a candy bar that costs a quarter?	Moment(s) throughout	
How do you know?	During the lesson check in	
Fact Practice	with students repeatedly.	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking.	
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Take advantage of any teachable moments	
2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ "	ended questions to determine what the rest of the group is thinking	
You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look	When possible, engage students in a "teach to learn" opportunity and have the	



through his/her cards (of course we hope the correct response.	student become the teacher	
Today you will introduce this activity and be		
Have students write the entire Fact Family	on the white board	
6 + 9 = 15		
9 + 6 = 15		
15 6-0		
15 0 - 6		
13 - 9 - 0		
Bring two students up to practice the conve	rsation.	
I ry it again with several other pairs of stude	nts.	
Then have children find a partner and pract	ice the conversation. Do this at least 4 times.	
Remember that today they are only doing the	he Fact Family of 6, 9 and 15.	
Mand for Today, angler	/ocabulary	It is important to review
word for Today: analog		often throughout the day
Description: The word analog is a referen	ce to a type of clock. It is a clock that has a face	
with the numbers 1-12 on it. It has hands the	nat move to show the time. It has a long hand	Complete the Vocabulary
which is a minute tracking hand and a short	hand which is an hour tracking time. Analog	notebook for each word.
clock require that you learn how to read the	time that the two hands are pointing to.	When possible, have
In your Vocabulary Notebook create the en	ry for the word "analog" and with a friend review	students experience the word
and he sure that it cantures your understan	ding of the word	(Ex. 4 students creating a
Vocabulary Notebook Sample:		right angle, multiple students
New Word	My Description	acting out an equation)
	My Description	Vocabulary Notebooks can
		bo mado from ¹ / ₂ of a
picnic	Hot dogs, mustard, catsup, drinks, ball	composition book
	games, family fun at the park	
Personal Connection	Drawing	
I love to go to the park with my family.		
We take a picnic lunch and barbeque hot		
dogs.		
Students will complete this notebook for ea	ch vocabulary word that they are given.	
A	ctivity	Focus on having young
Tell	ing Time	people "compete" in pairs or
		small groups. Once a game
Teday, you are going to wark with children on talling time by leading at analog shark. Down		is mastered you can utilize it
rouay you are going to work with children t	The new second	in the "When Homework Is
Several clocks (clicles) on the board.	where on the cleak face. Discuss have the	Complete" center
vvork through the process of placing the nu	mbers on the clock face. Discuss now the	
ionger hand points to the minutes and the s	nort nand points to the hour. Discuss that when	
the large hand is pointing to the 12 it means	that there are 0 minutes (also talk about that	
Lthere are 60 minutes in 1 hour) Today you	are going to focus on telling time to the hour.	



Pass out copies of Worksheet #1 to each pair of students. You will need to get this	
worksheet by going to the website at Have them work through the worksheet together.	
Have children transfer the analog time from the worksheet to the digital clock worksheet	
provided.	

C	losing
R	eview
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
D	ebrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do math	n?
What is a number?	
What is a letter?	
Are they the same?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them





1st Grade

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Component	Math
Grade Level:	First Grade
Lesson Title:	Telling Time to the Half Hour #1
Focus:	Telling Time

Materials:

White boards Crayolas Activity at the end of the lesson plan

Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about telling time? What are some of the ways that we measure time? Is a season a measurement of time? What are the seasons? Do we measure time in months? What are the names of the months? What about days? What are the names of the days? We also measure in weeks. Weeks are how many days long? How about hours? How many in a day? How about minutes? How many minutes in an hour?

We need to track time and there are many different ways that we can do that.

Content (the "Meat")		
Problem of the Day Look at the graph below. Which cookie is the most well-liked? How do you know?	*Activity → Teachable Moment(s) <i>throughout</i>	
Sugar	During the lesson check in with students repeatedly.	
Chocolate Coconut Date Image: Coconut in the second secon	Check in about what is happening and what they are thinking	
	Take advantage of any teachable moments	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking	
1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	When possible, engage students in a "teach to learn" opportunity and have the	



After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 7, 7, and 14. Have students write the entire Fact Family on the white board. 7 + 7 = 14 7 + 7 = 14 14 - 7 = 7 14 - 7 = 7 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 7, 7, and 14. Share with students that this fact is a double—the addends are the same.		student become the teacher
Math V	(ocabulary	It is important to review
Word for Today: digital Description: The term digital refers to a type face of the clock in the same way that you w digital clock would read: 12:00. If it were th If the time is to the half hour, in other words this: 4:30. Since there are 60 minutes in ar Have children complete the Vocabulary note Vocabulary Notebook Sample:	e of clock that has the numbers written on the vould write it yourself. If it is twelve o'clock, a ree o'clock, the digital clock would read: 3:00. if it was four thirty, a digital clock would look like a hour, ½ hour would be 30 minutes.	academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students
New Word	My Description	acting out an equation)
picnic	Hot dogs, mustard, catsup, drinks, ball games, family fun at the park	Vocabulary Notebooks can be made from ½ of a composition book
Personal Connection	Drawing	
I love to go to the park with my family. We take a picnic lunch and barbeque hot dogs.		
Students will complete this notebook for eac	h vocabulary word that they are given.	
Ad Telli	ctivity ng Time	Focus on having young people "compete" in pairs or



Today you are going to work with children on telling time by looking at analog clock. Draw several clocks (circles) on the board.	small groups. Once a game is mastered you can utilize it in the "When Homework Is
Work through the process of placing the numbers on the clock face. Discuss how the longer hand points to the minutes and the short hand points to the hour. Discuss that when the large hand is pointing to the 12 it means that there are 0 minutes (also talk about that there are 60 minutes in 1 hour). Today we are going to focus on telling time to the $\frac{1}{2}$ hour. Discuss that since the 6 is $\frac{1}{2}$ way around the clock it is called the $\frac{1}{2}$ hour. Share with children that $\frac{1}{2}$ of 60 minutes is 30 minutes and that this is why we call the $\frac{1}{2}$ hour thirty—for the 30 minutes in a $\frac{1}{2}$ hour.	Complete" center
Pass out copies of Worksheet #3 to each pair of students. Have them work through the worksheet together. Have children transfer the analog time from the worksheet to the digital clock worksheet provided.	

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do m	ath?
What is a cylinder?	
Where can you see them in the world?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them



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1st Grade

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Component	Math
Grade Level:	First Grade
Lesson Title:	Telling Time to the Hour and Half Hour
Focus:	Telling time

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Activity at the end of the lesson plan
Socks	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about telling time? What are some of the ways that we measure time? Is a season a measurement of time? What are the seasons? Do we measure time in months? What are the names of the months? What about days? What are the names of the days? We also measure in weeks. Weeks are how many days long? How about hours? How many in a day? How about minutes? How many minutes in an hour?

We need to track time and there are many different ways that we can do that.

Content (the "Meat")		
Problem of the Day Draw a picture that will illustrate the number sentence below. Explain your picture.	*Activity → Teachable Moment(s) <i>throughout</i>	
7 – 3 = 4	During the lesson check in with students repeatedly.	
Fact Practice	Check in about what is happening and what they are	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	thinking. Take advantage of any teachable moments	
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3	Stop the class and focus on a student's key learning or	
2 + 1 = 3 3 - 2 = 1	ended questions to determine what the rest of	
3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say,	the group is thinking	
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	students in a "teach to learn" opportunity and have the	



You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 7, 8 and 15. Have students write the entire Fact Family on the white board. 7 + 8 = 15 8 + 7 = 15 15 - 7 = 8 15 - 8 = 7 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times.	
Math Vocabulary Word for Today: ½ hour Description: The term ½ hour refers to 30 minutes which is half of an hour. A lot of TV shows are just ½ hour long. The may last from 7:00 – 7:30 for example. That means that you could watch two different programs in 1 hour, each one taking ½ of the time. Complete an entry for ½ hour in your Vocabulary Notebook. Vocabulary Notebook Sample: New Word My Description Personal Connection Hot dogs, mustard, catsup, drinks, ball games, family fun at the park I love to go to the park with my family. We take a picnic lunch and barbeque hot dogs. Drawing Students will complete this notebook for each vocabulary word that they are given. Students will complete this notebook for each vocabulary word that they are given.	
Activity Telling Time Today we will review both hour and ½ hour time with a game of concentration. Time Match <u>Directions:</u> 1. Divide students into pairs 2. Give each pair a set of Time Match Cards 3. Shuffle the Time Match Cards and place them in a grid that is 4 cards by 4 cards, face	
	<pre>cactly as it is written) with 3-5 other II 4 problems from the days before, and nd responder will need to quickly look mber without looking) and gives the the Fact Family of 7, 8 and 15. inte board.</pre>



4.	Player 1 turns over two cards, if they match then player removes the cards and places	
	two new cards in the vacant spaces	
5.	Player 2 then takes a turn	
6.	When all the cards have been matched the game is over.	

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
How can you use the information from today in school torr	norrow?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them



1 st Grade			
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9:00	9:30	10:00	10:30
11:00	11:30	8:00	8:30
1:00	1:30	2:00	2:30
3:00	3:30	4:00	4:30
5:00	5:30	7:00	7:30



*Activity \rightarrow Teachable

Moment(s) *throughout*

During the lesson check in

Consult 4 Kids Lesson Plans

Component	Math
Grade Level:	First Grade
Lesson Title:	How Much? #1
Focus:	Money

Materials:

White boards Crayolas

Socks

Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about money? What are the names of the most commonly used coins in the United States. What does it mean when someone asks you if you have any change? Which of our coins is largest? Which is smallest? How many pennies in \$1.00. How many dimes in \$1.00. What is the difference between these two symbols: \$ and ¢? What is something that you can buy for \$1.00?

Content (the "Meat")

Problem of the Day

Draw a picture of a clock that shows that your favorite television show begins at 7:30. Tell how you know that your clock is correct.

	with students repeatedly.
Fact Practice	Check in about what is
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	happening and what they are
and subtraction. The key is for children to learn that numbers have a relationship with one	thinking.
another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	teachable moments
They will write the problem in rour ways: 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$ then $2 + 1 = 3$ "	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	When possible, engage
You should have them practice this conversation (exactly as it is written) with 3-5 other	students in a "teach to learn"
students every day. On the 5 th day, you will utilize all 4 problems from the days before, and	opportunity and have the
the conversation will follow the pattern, but the second responder will need to guickly look	student become the teacher



through his/her cards (of course we hope the correct response. Today you will introduce this activity and be Have students write the entire Fact Family of 7 + 9 = 16 9 = 7 = 16 16 - 7 = 9 16 - 9 = 7 Bring two students up to practice the conver Try it again with several other pairs of stude Then have children find a partner and practi Remember that today they are only doing the		
Math Vocabulary Word for today: coin Description: the term coin refers to money around the world that it is made out of metal. It is not paper money. A coin is round and in some countries it will have a hole in the middle. A coin can also be called change. In the United States the four most common coins are the penny, the nickel, the dime, and the quarter. Each of these has a different value. Ask children to share the value of each of these coins with you. Have children complete the vocabulary notebook for the word coin. Vocabulary Notebook Sample: New Word My Description picnic Hot dogs, mustard, catsup, drinks, ball games, family fun at the park		It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
Personal Connection I love to go to the park with my family. We take a picnic lunch and barbeque hot dogs.	Drawing	
Activity Money The focus for the next 7 days will be money, combining both bills and coins, understanding the decimal point and how this is all compared to 100 cents in a dollar. There are four main coins that we use in the United States. They are the penny, the nickel, the dime and the quarter. We also have a 50¢ piece and a silver dollar, but those are not used as often as the other four coins. Each coin has a front (called the head) and a back (called the tail). A penny is worth 1¢, a nickel is worth 5¢, a dime is worth 10¢, and a quarter is worth 25¢. These values are all in comparison with the 100¢ it takes to make a dollar. Work through several examples of counting money with the children. Draw the coins by drawing a circle and writing the value of the coin inside. For example:		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center



1¢ 10		
Once the students have practiced they are ready to participate in the activity.		
 How Much? <u>Directions:</u> Divide the students into pairs Give each pair a deck of How Much cards Player 1 selects a card and determines the value of the coins on the card in cents. Player 2 repeats the process Activity is over when all of the cards have been selected. 		

	Closing
	Review
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of next time?	
What are the different shapes that you made with the marshmallows and toothpicks	
Where can you find those shapes in the world?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them



1st Grade How Much?









Component	Math
Grade Level:	First Grade
Lesson Title:	How Much? #2
Focus:	Money

Materials:

White boards Crayolas Socks Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about money? What are the names of the most commonly used coins in the United States. What does it mean when someone asks you if you have any change? Which of our coins is largest? Which is smallest? How many pennies in \$1.00. How many dimes in \$1.00. What is the difference between these two symbols: \$ and ¢? What is something that you can buy for \$1.00?

Content (the "Meat")			
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>		
Is it possible or impossible that there will be a cloud in the sky tomorrow? Explain your thinking.	During the lesson check in with students repeatedly.		
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1 + 2 = 3$ $2 + 1 = 3$	Check in about what is happening and what they are thinking. Take advantage of any teachable moments Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking When possible, engage students in a "teach to learn" opportunity and have the		
3-2=1 3-1=2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other			


students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 8, 8 and 16. Have students write the entire Fact Family on the white board. 8 + 8 = 16 8 + 8 = 16 16 - 8 = 8 16 - 8 = 8 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 8, 8, and 16.		student become the teacher
Remember that today they are only doing the Fact Family of 8, 8, and 16. Math Vocabulary Word for today: value Description: The term value refers to how much something is worth. We place a value on things and you can generally figure the value in terms of money. For example, you might spend \$1.00 for a candy bar and get some change back, but is you were going to buy a pair of shoes, you would probably need at least \$10.00 to \$20.00. In the United States we believe that there is more value in a pair of shoes than in a candy bar. Think about some common items that you have at your house. What is the value of each of those when it comes to money? Which is considered more valuable? Create an entry in your Vocabulary Notebook for the word value. Vocabulary Notebook Sample: New Word My Description Hot dogs, mustard, catsup, drinks, ball games, family fun at the park Personal Connection Drawing I love to go to the park with my family. We take a picnic lunch and barbeque hot dogs		It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
Activity Money There are four main coins that we use in the United States. They are the penny, the nickel, the dime and the quarter. We also have a 50¢ piece and a silver dollar, but those are not used as often as the other four coins. Each coin has a front (called the head) and a back (called the tail). A penny is worth 1¢, a nickel is worth 5¢, a dime is worth 10¢, and a		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center



quarter is worth 25¢. These values are all in comparison with the 100¢ it takes to make a dollar. Work through several examples of counting money with the children. Draw the coins by drawing a circle and writing the value of the coin inside. For example:	
1¢ 10	
Once the students have practiced they are ready to participate in the activity.	
 How Much? <u>Directions:</u> Divide the students into pairs Give each pair a deck of How Much cards Player 1 selects a card and determines the value of the coins on the card in cents. Player 2 repeats the process Activity is over when all of the cards have been selected. 	

Closing
Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

What are the different shapes that you made with the marshmallows and toothpicks

Where can you find those shapes in the world?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them



1st Grade How Much?









Component	Math
Grade Level:	First Grade
Lesson Title:	Going Shopping #1
Focus:	Money

Materials:

White boards Crayolas

Socks

Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about money? What are the names of the most commonly used coins in the United States. What does it mean when someone asks you if you have any change? Which of our coins is largest? Which is smallest? How many nickels in \$1.00. How many quarters in \$1.00. What is the difference between these two symbols: \$ and ¢? What is something that you can buy for \$1.00? Would you rather have 3 quarters or 6 dimes? Explain your thinking.

Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>	
What number makes this sentence true? How do you know your answer is correct?	During the lesson check in with students repeatedly.	
8 = 5	Check in about what is happening and what they are	
Fact Practice	thinking.	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments	
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking	
3-1=2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher	



students every day. On the 5 th day, you will the conversation will follow the pattern, but t through his/her cards (of course we hope the correct response. Today you will introduce this activity and be Have students write the entire Fact Family of 8 + 9 = 17 9 + 8 = 17 17 - 8 = 9 17 - 9 = 8 Bring two students up to practice the convert Try it again with several other pairs of stude. Then have children find a partner and practice.		
Math Vocabulary Word for Today: quarter Description: Quarter is a word that we use to describe a coin in the United States that is worth \$.25 or 25¢. It is called a quarter because it takes four of them to equal one dollar, each coin is worth a quarter of a dollar. Practice this Quarter Chant with the students. Then have students draw four quarters which is worth \$1.00 Quarter Chant Quarter, quarter Big and bold You're worth twenty-five I am told. Have children revisit the entry in the Vocabulary Notebook for the word quarter.		It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
New Word	My Description	
picnic Personal Connection I love to go to the park with my family. We take a picnic lunch and barbeque hot dogs.	Hot dogs, mustard, catsup, drinks, ball games, family fun at the park Drawing	
Ad M Using Coins	ctivity loney	Focus on having young people "compete" in pairs or small groups. Once a game



Understanding how to count coins and values of combined coins, is only half of it. It is important for you to determine what you can buy with the money you have.		is mastered you can utilize it in the "When Homework Is
Today we are going to do an activity that gives you an opportunity to count the coins that		Complete" center
you	nave and then determine what you can buy.	
Den	nonstrate several problems with the students before they pair up to participate in the	
activ	vity.	
Goi	ng Shopping	
Dire	<u>ctions:</u>	
1.	Divide students into pairs	
2.	Give each pair a deck of Going Shopping Cards, a Going Shopping Game Board, and	
	a white board	
3.	Player 1 draws a Going Shopping Card and determines how much money he/she has	
4.	Player 1 then determines what he/she will purchase and places a token on that item	
	on the game board	
5.	Player 2 then repeats the process	
6.	Game is over when all of the cards have been drawn	
1.	Note: more than one person can purchase each item.	

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about today's lesson?	
How can you use the information from today during class	tomorrow?
What is one key learning you had today in math?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them



1st Grade Going Shopping











Going Shopping Game Board

Select the item that you most want. Put a token on the item you select. Be sure that you can afford the item that you select.





*Activity \rightarrow Teachable

Moment(s) throughout

Consult 4 Kids Lesson Plans

Component	Math
Grade Level:	First Grade
Lesson Title:	Going Shopping #2
Focus:	Money

Materials:

White boards Crayolas

Socks

Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about money? What are the names of the most commonly used coins in the United States. What does it mean when someone asks you if you have any change? Which of our coins is largest? Which is smallest? How many nickels in \$1.00. How many quarters in \$1.00. What is the difference between these two symbols: \$ and ¢? What is something that you can buy for \$1.00? Would you rather have 15 nickels or 8 dimes? Explain your thinking.

Content (the "Meat")

Problem of the Day Count by 2s to 63 beginning at 27. Write the numbers that you will write down.

	During the lesson check in
Fact Practice	with students repeatedly.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1+2=3	Take advantage of any teachable moments
2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	ended questions to determine what the rest of the group is thinking
You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher





correct response. Today you will introduce this activity and beg double) Have students write the entire Fact Family or 9 + 9 = 18 9 + 9 = 18 18 - 9 = 9 18 - 9 = 9 Bring two students up to practice the converse Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the give you examples of other doubles. Ask students other fact families.		
Math Vocabulary Word for Today: nickel Description: A nickel is coin in the United States that is equal to \$.05 or 5¢. A nickel is bigger than both a dime and a penny. It takes two nickels to = one dime. It takes 5 pennies to equal one nickel. Practice this Nickel Chant with the students. Then have them draw 5 nickels (this equals a quarter—count by 5's) Nickel Chant Nickel, nickel Thick and fat You're worth five cents I know that!		It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
New Word	My Description	
picnic	Hot dogs, mustard, catsup, drinks, ball games, family fun at the park	
I love to go to the park with my family. We take a picnic lunch and barbeque hot dogs.		
Activity Money Using Coins Understanding how to count coins and values of combined coins, is only half of it. It is		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is





imp Tod you Der acti	ortant for you to determine what you can buy with the money you have. ay we are going to do an activity that gives you an opportunity to count the coins that have and then determine what you can buy. nonstrate several problems with the students before they pair up to participate in the vity.	Complete" center
Goi Dire	ng Shopping actions:	
1.	Divide students into pairs	
2.	Give each pair a deck of Going Shopping Cards, a Going Shopping Game Board, and a white board	
3.	Player 1 draws a Going Shopping Card and determines how much money he/she has	
4.	Player 1 then determines what he/she will purchase and places a token on that item	
	on the game board	
5.	Player 2 then repeats the process	
6.	Game is over when all of the cards have been drawn	
	Note: more than one person can purchase each item.	

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Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

Give an example of how you will use what we did today in school tomorrow.

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them



1st Grade Going Shopping









Going Shopping Game Board

Select the item that you most want. Put a token on the item you select. Be sure that you can afford the item that you select.





Component	Math
Grade Level:	First Grade
Lesson Title:	Circle the Coins #1
Focus:	Money

Materials:

White boards Crayolas

Socks

Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Focus Student's Prior Knowledge

What do you know about money? What are the names of the most commonly used coins in the United States. What does it mean when someone asks you if you have any change? Which of our coins is largest? Which is smallest? How many nickels in \$1.00. How many guarters in \$1.00. What is the difference between these two symbols: \$ and ¢? What is something that you can buy for \$1.00? Would you rather have 40 pennies or 8 nickels? Explain your thinking.

Content (the "Meat")

Problem of the Day Julie has a flat shape that has four equal sides. Does Julie have a triangle or a square? How do you know? During the lesson check in with students repeatedly. Fact Practice Check in about what is Fact Practice for 1st grade is looking at number families, so you are looking at both addition happening and what they are and subtraction. The key is for children to learn that numbers have a relationship with one thinking. another in adding and subtracting. Fact practice will follow this pattern every day. Take advantage of any

Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.

1 + 2 = 3

2 + 1 = 3

3 - 2 = 1

3 - 1 = 2

After they have written the problem in all 4 ways they will find a partner and say, "If 1 + 2 = 3, then 2 + 1 = 3".

When possible, engage The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". students in a "teach to learn" You should have them practice this conversation (exactly as it is written) with 3-5 other opportunity and have the students every day. On the 5th day, you will utilize all 4 problems from the days before, and student become the teacher the conversation will follow the pattern, but the second responder will need to guickly look

*Activity \rightarrow Teachable Moment(s) *throughout*

teachable moments

ended auestions to

the group is thinking

Stop the class and focus on a

student's key learning or

understanding. Ask open-

determine what the rest of



through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 9, 10, and 19 Have students write the entire Fact Family on the white board. 9 + 10 = 19 10 + 9 = 19 19 - 9 = 10 10 = 10 = 0		
Bring two students up to practice the conver Try it again with several other pairs of stude Then have children find a partner and practi Remember that today they are only doing th	sation. nts. ce the conversation. Do this at least 4 times. e Fact Family of 9, 10, and 19.	
Math V	/ocabulary	It is important to review
Word for Today: dime Description: Dime is a word for a United States coin that means \$.10 or 10¢. There are 10 dimes in \$1.00. The dime is the smallest United States coin. Review the Dime Chant with the children. Dime, dime Little and thin I remember You're worth ten. Have children review the Vocabulary notebook for the word "dime". Vocabulary Notebook Sample: New Word		academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
picnic	Hot dogs, mustard, catsup, drinks, ball games, family fun at the park	
Personal Connection	Drawing	
I love to go to the park with my family. We take a picnic lunch and barbeque hot dogs.		
A	ctivity	Focus on having young
Money Values of Coins Understanding what coins you will need to make a purchase is incredibly important. When children have money it is important that they make wise choices about spending it. Today and tomorrow children will practice a variation of Going Shopping. This time they will select the coins that they need to purchase an item.		people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center
Circle the Coins		



Directions:

- 1. Divide students into pairs
- 2. Give each pair a deck of Circle the Coins Cards and a Circle the Coins Game board
- 3. Place the Game Board between the 2 students
- 4. Player 1 draws a card, looks at the price of the item and then determines which coins he/she will need to utilize to purchase the item.
- 5. Once a coin has been used, Player places a marker on the coin.
- 6. Player 2 continues with the same format
- 7. Game is over when there are no more coins to make the cost of the item
- 1. Note: Once a coin is used it cannot be used a second time.

	Noning
l l	nosing
F	Review
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
[Debrief
What did you like about what we did today in math?	
What is a cube?	
How many sides does a cube have?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them



1st Grade Circle the Coin Game Board









Heart Candy 37¢	Pretzels 73¢
•• • Happy Face Cookie 32¢	Slinky 52¢
Flower Pot 65¢	♥♦♣♠ Deck of Cards 83¢
Lightning Shoes 89¢	Starburst Candy 64¢
Arrows 42¢	GUM Gum 28¢
Beach Toy 51¢	1 st Blue Ribbon 47¢
"Diamond" 39¢	Book 76¢



Component	Math
Grade Level:	First Grade
Lesson Title:	Circle the Coins #2
Focus:	Money

Materials:

White boards Crayolas Activity at the end of the lesson plan

Crayola Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about money? What are the names of the most commonly used coins in the United States. What does it mean when someone asks you if you have any change? Which of our coins is largest? Which is smallest? How many nickels in \$1.00. How many quarters in \$1.00. What is the difference between these two symbols: \$ and ¢? What is something that you can buy for \$1.00? Would you rather have 9 nickels or 4 dimes? Explain your thinking

Content (the "Meat")		
Problem of the Day You have nickels and pennies. Show at three ways that you can have 10¢.	*Activity → Teachable Moment(s) <i>throughout</i>	
5 1	During the lesson check in with students repeatedly.	
	Check in about what is happening and what they are	
Fact Practice	thinking.	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments	
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher	



	students every day. On the 5 th day, you will the conversation will follow the pattern, but the through his/her cards (of course we hope the correct response. Today you will introduce this activity and be Have students write the entire Fact Family of 10 + 10 = 20 10 + 10 = 20 20 - 10 = 10 20 - 10 = 10 Bring two students up to practice the conver Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the	utilize all 4 problems from the days before, and he second responder will need to quickly look ey remember without looking) and gives the gin with the Fact Family of 10, 10, and 20. In the white board. sation. nts. ce the conversation. Do this at least 4 times. e Fact Family of 10, 10 and 20.	
	Math V	/ocabulary	It is important to review
	Word for today: penny		academic math vocabulary
Description: Penny is the word we use to name the United States coin that is worth \$.01 or 1¢. There are 100 pennies in a dollar. The penny is made out of copper and is a brownish color. Review the Penny Chant with the students. Penny, penny Easily spent Copper brown And worth one cent Review the entry for the word penny that is in your Vocabulary notebook. Vocabulary Notebook Sample:		often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a	
	New Word	My Description	composition book
	picnic	Hot dogs, mustard, catsup, drinks, ball games, family fun at the park	
	Personal Connection	Drawing	
	I love to go to the park with my family. We take a picnic lunch and barbeque hot dogs.		
	Ac	ctivity	Focus on having young
Money Values of Coins Understanding what coins you will need to make a purchase is incredibly important. When children have money it is important that they make wise choices about spending it. Today and tomorrow children will practice a variation of Going Shopping. This time they will select		people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center	



Circ	cle the Coins
Dire	ections:
1.	Divide students into pairs
2.	Give each pair a deck of Circle the Coins Cards and a Circle the Coins Game board
3.	Place the Game Board between the 2 students
4.	Player 1 draws a card, looks at the price of the item and then determines which coins
	he/she will need to utilize to purchase the item.
5.	Once a coin has been used, Player places a marker on the coin.
6.	Player 2 continues with the same format
7.	Game is over when there are no more coins to make the cost of the item
1.	Note: Once a coin is used it cannot be used a second time.

	Closing
	Review
Say:	
Please recap what we did today.Did we achieve our objectives?	
	Debrief
What did you like about what we did today in math?	
What do you know about a calendar?	
What are the names of the month?	
What are the names of the days of the week?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them



1st Grade Circle the Coin Game Board









Heart Candy 37¢	Pretzels 73¢
Happy Face Cookie 32¢	Slinky 52¢
Flower Pot 65¢	♥♦♣♠ Deck of Cards 83¢
Lightning Shoes 89¢	Starburst Candy 64¢
Arrows 42¢	GUM Gum 28¢
Beach Toy 51¢	1 st Blue Ribbon 47¢
"Diamond" 39¢	Book 76¢



Component	Math
Grade Level:	First Grade
Lesson Title:	Student Activity Choice
Focus:	Review

Materials:

White boards Crayolas

Socks

Materials for games played the past 10 days

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about money? What are the names of the most commonly used coins in the United States. What does it mean when someone asks you if you have any change? Which of our coins is largest? Which is smallest? How many nickels in \$1.00. How many quarters in \$1.00. What is the difference between these two symbols: \$ and ¢? What is something that you can buy for \$1.00? Would you rather have 3 quarters or 6 dimes and 3 nickels? Explain your thinking

Content (the "Meat")	
Problem of the Day Write the number that comes both before and after the following number. Tell how you	*Activity → Teachable Moment(s) <i>throughout</i>
know you are correct.	During the lesson check in with students repeatedly.
29	Check in about what is happening and what they are
Fact Practice	thinking.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Take advantage of any teachable moments
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking
3-1=2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher



students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	
Today you will introduce this activity and begin with the Fact Family of 6, 9 and 15.	
Have students write the entire Fact Family on the white board.	
6 + 9 = 15	
9 + 6 = 15	
15 – 6 = 9	
15 – 9 = 6	
Bring two students up to practice the conversation.	
Try it again with several other pairs of students.	
Then have children find a partner and practice the conversation. Do this at least 4 times.	
Remember that today they are only doing the Fact Family of 6, 9, and 15	
Activity	Focus on having young
Today is review day. Students will be able to select from the Fraction Games you played	people "compete" in pairs or
for the last 10 days. Ask students to select from:	small groups. Once a game
Time Match	is mastered you can utilize it
How Much?	in the "When Homework Is
Going Shopping	Complete [®] center
Urcle the Coins	

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
Which of the games did you enjoy playing the most?	
What about this game is fun for you?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them



Grade Level: First Grade	Component
Lessen Titler Column Addition #1	Grade Level:
Lesson Inte: Column Addition #1	Lesson Title:
Focus: Addition	Focus:

Materials:

White boards Crayolas Socks (for erasers) dice (3 for each pair)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: John has 3 cookies. His friend gave him two cookies. How many cookies does he have in all?

Content (the "Meat")	
Problem of the Day I am the answer to the number sentence 3 + 4 = What number am I? Explain.	*Activity → Teachable Moment(s) <i>throughout</i>
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 4, 9 and 13. Have a white the active fact family of 4, 9 and 13.	During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



sation. nts. ce the conversation. Do this at least 4 times. e Fact Family of 4, 9 and 13.	
/ocabulary	It is important to review
ers to the adding of number when you have look like this: $3 + 4 + 2 = 9$. Or it could be	often throughout the day. Complete the Vocabulary notebook for each word.
3	
4	
<u>+2</u> You add a column in exactly the same way as you add 2 numbers, you just add one or two more numbers. Write several examples of a column addition problem. Create an entry for "column addition" in your Vocabulary Notebook	
	composition book.
My Description	
like a column.	
Drawing	
16 15 <u>+14</u>	
h vocabulary word that they are given.	
rtivity	Focus on baying young
n Addition ers in a vertical column or a horizontal row. ers only, for example $7 + 5$ or $23 + 6$ and so hat look like this: $4 + 5 + 6 = $ or 4 5 <u>6</u> er if you can find two addends that equal 10. Sometimes you cannot find a 10, so you add	Pocus on naving young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
	sation. nts. ce the conversation. Do this at least 4 times. e Fact Family of 4, 9 and 13. Yocabulary ers to the adding of number when you have look like this: $3 + 4 + 2 = 9$. Or it could be 3 4 2 as you add 2 numbers, you just add one or two a column addition problem. r Vocabulary Notebook. My Description More than two numbers in a vertical space, like a column. Drawing 16 15 +14 th vocabulary word that they are given. ctivity n Addition ers in a vertical column or a horizontal row. ers only, for example 7 + 5 or 23 + 6 and so hat look like this: $4 + 5 + 6 = $ or 4 5 6 ier if you can find two addends that equal 10. Sometimes you cannot find a 10, so you add

Tri Add

- Directions:
- 1. Divide students into pairs
- 2. Give each pair 3 dice (6-sided or 9 sided), white boards and pens/crayons
- 3. Player 1 rolls the dice and then create an addition problem on his/her white board
- 4. He/she then finds the total and reads the problem aloud to his partner
- 5. Player 2 then repeats the process
- 6. Activity is over when each player has had the opportunity to write 10 equations.

		Closing	
		Review	
Say:	Please recan what we did today		
•	Did we achieve our objectives?		

Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

What does it mean when we say we found an answer by addition?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





Component	Math
Grade Level:	First Grade
Lesson Title:	Column Addition #2
Focus:	Addition

Materials:

White boards Crayolas Socks (for erasers) dice (3 for each pair)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: Fred has 3 marbles. He won 9 marbles playing marbles. How many marbles does Fred have altogether?

Content (the "Meat")	
Problem of the Day	*Activity → Teachable
If it takes 3 ants to carry a cookie. How many ants are needed to carry 3 cookies? Draw a	Moment(s) <i>throughout</i>
picture to explain your thinking.	During the lesson check in with students repeatedly.
Fact Practice	Check in about what is
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	happening and what they are
and subtraction. The key is for children to learn that numbers have a relationship with one	thinking.
another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any
They will write the problem in four ways.	teachable moments.
1 + 2 = 3	Stop the class and focus on a
2 + 1 = 3	student's key learning or
3 - 2 = 1	understanding. Ask open-
3 - 1 = 2	ended questions to
After they have written the problem in all 4 ways they will find a partner and say,	determine what the rest of
"If $1 + 2 = 3$, then $2 + 1 = 3$ ".	the group is thinking.
The other student will respond with "Yes, and since that is true $2 - 1 = 2$ and $2 - 2 = 1$ "	When possible, engage
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	students in a "teach to learn" opportunity and have the student become the teacher.



Today you will introduce this activity and begin Have students write the entire Fact Family on	n with the Fact Family of 4, 6, and 10. the white board.	
4 + 6 = 10		
6 + 4 = 10		
10 – 4 = 6		
10 – 6 = 4		
Bring two students up to practice the conversa	ation.	
Try it again with several other pairs of student	S.	
Then have children find a partner and practice	e the conversation. Do this at least 4 times.	
Remember that today they are only doing the	Fact Family of 4, 6, and 10	
Math Vo	cabulary	It is important to review
Word for Today: vertical		academic math vocabulary
Description: The word vertical means up and	d down like you are when you stand up	often throughout the day
straight The walls of buildings are vertical tra	es are verticals, and columns are vertical as	Complete the Vocabulary
well The opposite of vertical is horizontal whi	ch means like you are when you lay down	notebook for each word.
In your Vessbulary Netsback graats the entry	for the word "verticel" and with a friend review	When possible have
and be sure that it captures your understanding	not the word vehical and with a menu review	students experience the word
Vocabulary Notebook Sample:		(Ex. 4 students creating a
New Word	My Description	right angle, multiple students
	my Description	acting out an equation).
vertical	A line that appa up and down, like when	Vocabulary Notebooks can
vertical	A life that goes up and down, like when	be made from $\frac{1}{2}$ of a
	you are standing.	composition book.
Derected Connection	Drowing	•
Personal Connection		
When I well ad down the street I was		
when I walked down the street I was		
vertical.	↓ ↓	
	·	
Students will complete this notebook for each	vocabulary word that they are given.	
Act	ivity	Focus on having young
Add	ition	people "compete" in pairs or
		small groups. Once a game
Column Addition		is mastered you can utilize it
A column of numbers is usually 3 to 4 number	s in a vertical column or a horizontal row	in the "When Homework Is
Often times we look at addition of two number	is only for example $7 + 5$ or $23 + 6$ and so	Complete" center.
on In column addition you have problems the	at look like this: $4+5+6 = 0$	
	4	
	5	
	+6	
When adding a column, it is sometimes easier	r if you can find two addends that equal 10.	
For example, 4 + 6 = 10, and 10 + 5 = 15. So	metimes you cannot find a 10, so you add	
each of the numbers.		
Tri Add		
Urections:		
I DIVIDE STUDENTS INTO DAI'S		



- 2. Give each pair 3 dice (6-sided or 9 sided), white boards and pens/crayons
- 3. Player 1 rolls the dice and then create an addition problem on his/her white board
- 4. He/she then finds the total and reads the problem aloud to his partner
- 5. Player 2 then repeats the process
- 6. Activity is over when each player has had the opportunity to write 10 equations.

Closing	
Review	
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
Debrief	
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
What is a number?	
What is a letter?	
Are they the same?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	First Grade
Lesson Title:	Add 'Em #1
Focus:	Addition

Materials:

White boards Crayolas

Socks

Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: Linda has 7 dolls. She got 2 dolls for her birthday. How many dolls does Linda have all together?

Content (the "Meat")		
Problem of the Day Dan has a card with 5 + 2 = on it. Fred has a card with 3 + 6 = Whose card has the greater sum? How do you know?	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in with students repeatedly	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



Today you will introduce this activity and begin Have students write the entire Fact Family on 4 + 7 = 11 $7 + 4 = 1^{\circ}$ 11 - 4 = 7 11 - 7 = 4 Bring two students up to practice the converse Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the students that this fact is a double—the addence		
Math Vocabulary Word for Today: horizontal Description: The term horizontal describes the way you are when you are laying down at night one your bed or when you are laying down on the floor. Roads and streets are horizontal, so are sidewalks and trees when they fall down. Practice drawing a horizontal line. Horizontal is the opposite of vertical. Have children complete the Vocabulary notebook. Vocabulary Notebook Sample:		It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a
New Word horizontal	My Description Horizontal means going across.	right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
Personal Connection At night I sleep in a horizontal position.	Drawing	
Students will complete this notebook for each	vocabulary word that they are given.	
Activity AdditionColumn AdditionA column of numbers is usually 3 to 4 numbers in a vertical column or a horizontal row. Often times we look at addition of two numbers only, for example $7 + 5$ or $23 + 6$ and so on. In column addition you have problems that look like this: $4 + 5 + 6 = $ or 4 5 $+6$ When adding a column, it is sometimes easier if you can find two addends that equal 10. For example, $4 + 6 = 10$, and $10 + 5 = 15$. Sometimes you cannot find a 10, so you add each of the numbers.Add 'Em Directions: 1. Divide students into pairs		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.




- 2. Give each pair a Add 'Em Game Board and a deck of cards
- 3. Shuffle the cards
- 4. Player 1 turns up the first card and finds the sum of the three numbers. He/she then locates the answer on the game board and places a marker on it
- 5. Player two then repeats the process
- 6. Game is over when all spots are covered.

Closing Review Say: • • Did we achieve our objectives? Debrief What did you like about what we did today in math? What did you like to do more of the next time we do math? What is a cylinder? Where can you see them in the world?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Add 'Em

10	14	15	16	15	11	16
17		12				
12	Add "Em Draw an "Add 'Em" card and calculate the total of the digits. Find the answer on the game board and place a marker on it. Students may use a white board to draw the problems so they can count the items.					18
19						14
20						16
18						13
17	15	18	15	15	16	19



1st Grade Add 'Em Cards

5	7	8	9
3	3	4	5
<u>+2</u>	<u>+4</u>	<u>+3</u>	<u>+2</u>
6	8	9	8
2	2	3	7
<u>+7</u>	<u>+1</u>	<u>+4</u>	<u>+2</u>
5	6	7	9
4	5	6	6
<u>+3</u>	<u>+1</u>	<u>+5</u>	<u>+4</u>
6	7	8	9
3	4	5	7
<u>+5</u>	<u>+9</u>	<u>+3</u>	<u>+2</u>
7	8	9	9
2	3	4	8
<u>+4</u>	<u>+6</u>	<u>+2</u>	<u>+1</u>
6	7	8	9
4	5	6	9
<u>+5</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>



Component	Math
Grade Level:	First Grade
Lesson Title:	Add 'Em #2
Focus:	Addition

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Activity at the end of the lesson plan
Socks (for erasers)	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: Joe has 3 ice cream bars. Frank has 5 ice cream bars. Luis has 2 ice cream bars. How many ice cream bars do the boys have all together?

Content (the "Meat")

Problem of the Day

Copy and complete the list of numbers. How do you know what the missing numbers are?

5, 10, 15, 20, ____, ____, ____

Fact Practice

Fact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3

1 + 2 = 32 + 1 = 3

3 – 2 = 1

3 – 1 = 2

After they have written the problem in all 4 ways they will find a partner and say, "If 1 + 2 = 3, then 2 + 1 = 3".

The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5th day, you will utilize all 4 problems from the days before, and

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

Check in about what is happening and what they are thinking.

Take advantage of any teachable moments.

Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.





the conversation will follow the pattern, but t		
through his/her cards (of course we hope the	ey remember without looking) and gives the	
correct response.	ain with the Fact Family of 4, 9 and 10	
Locay you will introduce this activity and be	gin with the Fact Family of 4, 6 and 12.	
The suberns while the entire ract ranning to $1 \pm 8 = 12$		
4 + 0 - 12 8 + 1 - 12		
12 - 1 = 8		
12 - 4 = 0 12 - 8 = 4		
Bring two students up to practice the conver	sation	
Try it again with several other pairs of stude	nts	
Then have children find a partner and practi	ce the conversation Do this at least 4 times	
Remember that today they are only doing th	e Fact Family of 4. 8. and 12.	
Math V	/ocabulary	It is important to review
Word for Today: sum	-	academic math vocabulary
Description : The term sum is the word we	use to talk about the answer in an addition	often throughout the day.
problem. When you ad the number $3 + 2$ vo	ou will have a total of 5. This total is a sum.	Complete the Vocabulary
What is the sum in this problem: $5 + 1 = 6$?	What is the sum in this problem $3 + 4 + 1 + 8$?	notebook for each word.
Complete an entry for sum in your Vocabula	urv Notebook	When possible, have
Vocabulary Notebook Sample:		students experience the word
New Word	My Description	(Ex. 4 students creating a
	y p	right angle, multiple students
sum	Add it up and get the sum	acting out an equation).
		Vocabulary Notebooks can
Personal Connection	Drawing	be made from 1/2 of a
	5	composition book.
9 is the sum of 6 + 3.	2 + c = 0	
	- 5 † 0 – 9	
Students will complete this notebook for eac	ch vocabulary word that they are given.	
A	ctivity	Focus on having young
Ac	Idition	people "compete" in pairs or
Column Addition		small groups. Once a game
A column of numbers is usually 3 to 4 numb	ers in a vertical column or a horizontal row.	is mastered you can utilize it
Often times we look at addition of two numb	ers only, for example 7 + 5 or 23 + 6 and so	in the "When Homework Is
on. In column addition you have problems t	hat look like this: $4 + 5 + 6 = or$	Complete" center.
When adding a column, it is sometimes easily		
For example, $4 + 6 = 10$, and $10 + 5 = 15$.		
each of the numbers.		
Add 'Em		
Directions:		
1. Divide students into pairs		





3. Shuffle the cards

- 4. Player 1 turns up the first card and finds the sum of the three numbers. He/she then locates the answer on the game board and places a marker on it
- 5. Player two then repeats the process
- 6. Game is over when all spots are covered.

	Closing	
	Closing	
	Review	
Say:		
 Please recap what we did today. 		
Did we achieve our objectives?		
	Dahriaf	
	Debrief	
What did you like about what we did today in mat	h?	
How can you use the information from today in se	chool tomorrow?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Add 'Em

10	14	15	16	15	11	16	
17						12	
12	Drow o	Add "Em					
19	Draw an "Add 'Em" card and calculate the total of the digits. Find the answer on the game board and place a marker on it. Students may use a white board to draw the problems so they can count the items.					14	
20						16	
18						13	
17	15	15 18 15 15 16					



1st Grade Add 'Em Cards

5	7	8	9
3	3	4	5
<u>+2</u>	<u>+4</u>	<u>+3</u>	<u>+2</u>
6	8	9	8
2	2	3	7
<u>+7</u>	<u>+1</u>	<u>+4</u>	<u>+2</u>
5	6	7	9
4	5	6	6
<u>+3</u>	<u>+1</u>	<u>+5</u>	<u>+4</u>
6	7	8	9
3	4	5	7
<u>+5</u>	<u>+9</u>	<u>+3</u>	<u>+2</u>
7	8	9	9
2	3	4	8
<u>+4</u>	<u>+6</u>	<u>+2</u>	<u>+1</u>
6	7	8	9
4	5	6	9
<u>+5</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>



Component	Math
Grade Level:	First Grade
Lesson Title:	Story Problems #1
Focus:	Word Problems

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about word or story problems? Many times when we do the "problem of the day" we have a story that goes with the math. When we do the math we a number sentence. What are some of the key words that you will find in word problems? How do these words help you know what to do?

Content (the "Meat")			
Problem of the Day	*Activity → Teachable		
Tell whether the number 10 makes each sentence true. Tell how you know for each.	Moment(s) <i>throughout</i>		
5 + 5 =	During the lesson check in		
6 + 3 =	with students repeatedly.		
3 + 7 = 4 + 6 =	Check in about what is happening and what they are		
Fact Practice	thinking.		
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	Take advantage of any		
and subtraction. The key is for children to learn that numbers have a relationship with one	teachable moments.		
another in adding and subtracting. Fact practice will follow this pattern every day.	Stop the class and focus on a		
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	student's key learning or		
They will write the problem in four ways.	understanding. Ask open-		
1 + 2 = 3	ended questions to		
2 + 1 = 3	determine what the rest of		
3 - 2 = 1	the group is thinking.		
3-1=2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.		



through his/her cards (of course we hope they correct response. Today you will introduce this activity and begi Have students write the entire Fact Family on 4 + 5 = 9 5 + 4 = 0 9 - 4 = 5 9 - 5 = 4 Bring two students up to practice the conversa Try it again with several other pairs of student		
Then have children find a partner and practice	e the conversation. Do this at least 4 times.	
Math Vo Word for today: context Description: The term context refers to the v that is represented in a number sentence. C and hopefully will make the picture of the mat help you understand.	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word	
Vocabulary Notebook Sample:		(Ex. 4 students creating a
New Word context	right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.	
Personal Connection	Drawing	
The story problem is the context for the number sentence 3 + 5 = 8.	eraser 3 + 5 = 8 total in all	
Act	ivity	Focus on having young
Word Problems: A word problem is a story that has math in it. a number sentence to represent the math. Ar had 7 cookies. His mother gave him 5 more. number sentence would look like this: 7 cook in the story. Words like now or all together tel went like this: Jorge had 7 cookies. His moth Jorge have left? would tell us that the numbe When we work with word problems it is import asked. This makes it easier to know whether Story Problems	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	
Directions: 1. Divide students into trios		



2.	Give each trio a Word Problem Card and an Answer Board	
3.	Working together, trios read the problem and write a number sentence and solve the	
	problem.	l
4.	The trio then looks to the Answer Board to be sure that there is an answer like the one	l
	they found.	l
	Activity is complete when all problems have been solved.	

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Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief	
What did you like about what we did today in math?	
What would you like to do more of next time?	
What are the different shapes that you made with the marshmallows and toothpicks	
Where can you find those shapes in the world?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Story Problems Card

There are 3 blue blocks and 5 red blocks. How many blocks are there in all?	Martin has 7 pencils. He gives 2 to a friend. How many pencils does Martin have left?
Joni is the only person swimming in the pool. 4 of her friends join her in the pool. How many people are swimming in the pool?	Ed has 10 cookies. He gives 3 to his teacher. How many does Ed have left?
Annie picked 3 tulips and 6 roses. How many flowers does Annie have all together?	Seth has 3 toy cars. His friend Abel has 7 toy cars. How many cars do they have altogether?
Ellie has 2 dogs. Mary has 5 dogs. How many dogs do they have altogether?	Will has 2 skates. His brother has 6 skates. How many skates do the have together?
Aaron has 2 fish. His brother gets him 5 fish for his birthday. How many fish does Aaron have now?	Nathan has 8 dogs. Tony takes 3 of the dogs on a walk. How many dogs does Nathan have now?
John has 6 green jelly beans, 4 red jelly beans and 2 yellow jelly beans. How many jelly beans does John have altogether?	Lori has 3 chocolate chip cookies, 1 sugar cookie, and 5 Snicker Doodles. How many cookies does Lori have altogether?
It took Julia 2 hours to clean her bedroom. It took her 2 hours to finish her homework. How much time has Julia used to complete these two activities?	Lily got 9 balloons for her birthday. 5 of the balloons popped. How many balloons does Lily have left?



1st Grade Story Problems Answer Key





Component	Math
Grade Level:	First Grade
Lesson Title:	Story Problems #2
Focus:	Word Problems

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about word or story problems? Many times when we do the "problem of the day" we have a story that goes with the math. When we do the math we a number sentence. What are some of the key words that you will find in word problems? How do these words help you know what to do?

Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>	
Jill has 10 red crayons and 3 green crayons in a box. She takes a crayon out of the box without looking. Which color is she more likely to pull out? How do you know?	During the lesson check in with students repeatedly.	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



Today you will introduce this activity and begin with the Fact Family of 5, 6 and 11.Have students write the entire Fact Family on the white board. $5 + 6 = 11$ $6 + 5 = 11$ $11 - 5 = 6$ $11 - 6 = 5$ Bring two students up to practice the conversation.Try it again with several other pairs of students.Then have children find a partner and practice the conversation. Do this at least 4 times.Remember that today they are only doing the Fact Family of 5, 6, and 11.			
Math Vocabulary Word for today: number sentence Description: The term number sentence refers to the problem that we write that demonstrates the math for the story we read. A number sentence can look like this: 4 + 5 = 9. The story might be John has 4 marbles. His mother gives him 5 marbles. How many marbles does John have altogether? Write a number sentence for this story: Judy has 3 flowers. She is given 5 more flowers. How many flowers does she have altogether? Create an entry in your Vocabulary Notebook for the word number sentence.		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).	
New Word	My Description	Vocabulary Notebooks can	
number sentence	Number sentences tell you how numbers are related	be made from ½ of a composition book.	
Personal Connection	Drawing		
If John has 2 pencils and Jill has 3 pencils, they have 5 pencils. This is the number sentence: 2 + 3 = 5	2 + 3 = 5		
	Activity	Focus on having young	
Word Problems Word Problems A word problem is a story that has math in it. When you hear a story problem you can write a number sentence to represent the math. An example of a story problem follows: Jorge had 7 cookies. His mother gave him 5 more. How many cookies does Jorge have now? A number sentence would look like this: 7 cookies + 5 cookies = 12 cookies. There are clues in the story. Words like now or all together tell us that we will add. If the word problem went like this: Jorge had 7 cookies. His mother ate 5 of them. How many cookies does Jorge have left? would tell us that the number sentence needs to look like this $7 - 5 = 2$. When we work with word problems it is important to think about what question we are being asked. This makes it easier to know whether or not we add or subtract.		people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	

Story Problems

Directions:

- 1. Divide students into trios
- 2. Give each trio a Word Problem Card and an Answer Board
- 3. Working together, trios read the problem and write a number sentence and solve the problem.
- 4. The trio then looks to the Answer Board to be sure that there is an answer like the one they found.
- 5. Activity is complete when all problems have been solved.

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
What are the different shapes that you made with the marshmallows and toothpicks	
Where can you find those shapes in the world?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





1st Grade Story Problems Card

There are 3 blue blocks and 5 red blocks. How many blocks are there in all?	Martin has 7 pencils. He gives 2 to a friend. How many pencils does Martin have left?
Joni is the only person swimming in the pool. 4 of her friends join her in the pool. How many people are swimming in the pool?	Ed has 10 cookies. He gives 3 to his teacher. How many does Ed have left?
Annie picked 3 tulips and 6 roses. How many flowers does Annie have all together?	Seth has 3 toy cars. His friend Abel has 7 toy cars. How many cars do they have altogether?
Ellie has 2 dogs. Mary has 5 dogs. How many dogs do they have altogether?	Will has 2 skates. His brother has 6 skates. How many skates do the have together?
Aaron has 2 fish. His brother gets him 5 fish for his birthday. How many fish does Aaron have now?	Nathan has 8 dogs. Tony takes 3 of the dogs on a walk. How many dogs does Nathan have now?
John has 6 green jelly beans, 4 red jelly beans and 2 yellow jelly beans. How many jelly beans does John have altogether?	Lori has 3 chocolate chip cookies, 1 sugar cookie, and 5 Snicker Doodles. How many cookies does Lori have altogether?
It took Julia 2 hours to clean her bedroom. It took her 2 hours to finish her homework. How much time has Julia used to complete these two activities?	Lily got 9 balloons for her birthday. 5 of the balloons popped. How many balloons does Lily have left?



1st Grade Story Problems Answer Key





Component	Math
Grade Level:	First Grade
Lesson Title:	Number Sentences to Stories #1
Focus:	Word Problems

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about word or story problems? Many times when we do the "problem of the day" we have a story that goes with the math. When we do the math we a number sentence. What are some of the key words that you will find in word problems? How do these words help you know what to do?

Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>	
Look at the numbers below. Which is an even number? Explain how you know. 3 17 6 15	During the lesson check in with students repeatedly.	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.	
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.	
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$ then $2 + 1 = 3$ "	the group is thinking.	
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



Today you will introduce this activity and begin with the Fact Family of 5, 7, and 12.Have students write the entire Fact Family on the white board. $5 + 7 = 12$ $7 + 5 = 12$ $12 - 5 = 7$ $12 - 7 = 5$ Bring two students up to practice the conversation.Try it again with several other pairs of students.Then have children find a partner and practice the conversation. Do this at least 4 times.Remember that today they are only doing the Fact Family of 85, 7 and 12.		
Math Vocabulary Word for Today: how many Description: The term how many is used in a word problem to let the reader know that this is asking you to perform a mathematical operation. If it is combined with the word left, reading how many left—this is a clue for you to subtract. If it is combined with the word altogether, then this is a clue for you to add. How many is a question and the others words let you know what kind of an answer is needed. Have children revisit the entry in the Vocabulary Notebook for the word how many.		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).
New Word how many	My Description Term used in a word problem that lets you know to add	Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection If I have 4 balloons and you have 3 balloons, how many do we have together?	Drawing	
Activity Word Problems Word Problems: A word problem is a story that has math in it. When you hear a story problem you can write a number sentence to represent the math. An example of a story problem follows: Jorge had 7 cookies. His mother gave him 5 more. How many cookies does Jorge have now? A number sentence would look like this: 7 cookies + 5 cookies = 12 cookies. There are clues in the story. Words like now or all together tell us that we will add. If the word problem went like this: Jorge had 7 cookies. His mother ate 5 of them. How many cookies does Jorge have left? would tell us that the number sentence needs to look like this 7 – 5 = 2. When we work with word problems it is important to think about what question we are being asked. This makes it easier to know whether or not we add or subtract. Today we are going to work on writing stories to go with number sentences. For example if you read the number sentence: $7 - 5 = 2$, you would need to make up a story such as, Jorge has 7 balloons. 5 of them popped. How many does he have left? Do several		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



examples with the students on the board.

Number Sentences to Stories #1 <u>Directions:</u>

- 1. Divide students into trios
- 2. Give each trio a Number Sentence Card
- Together, students work out stories for each of the number sentences that they find on the card.
- 4. Students may write or draw the stories.
- 5. After students have created stories for the 8 number sentences, bring group together to share the stories for the different number sentences.

C	Closing
F	Review
Say:	
• Please recap what we did today.	
 Did we achieve our objectives? 	
[Debrief
What did you like about today's lesson?	
How can you use the information from today during class t	omorrow?
What is one key learning you had today in math?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Number Sentence Cards # 1

7 – 3 = 4	6 + 2 = 8	4 + 7 = 11	7 – 5 =2
9 + 2 = 11	10 - 6 = 4	9 – 3 = 6	8 – 1 = 7



Component	Math
Grade Level:	First Grade
Lesson Title:	Number Sentences to Stories #2
Focus:	Word Problems

Materials:

White boards Crayolas

Socks

Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about word or story problems? Many times when we do the "problem of the day" we have a story that goes with the math. When we do the math we a number sentence. What are some of the key words that you will find in word problems? How do these words help you know what to do?

Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>	
Write a number sentence with a sum of 9. Use pictures, numbers, and words to show your thinking.	During the lesson check in with students repeatedly.	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.	
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.	
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of	
"If $1 + 2 = 3$, then $2 + 1 = 3$ ".	the group is thinking.	
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



Have students write the entire Fact Family o 5 + 8 = 13 8 + 5 = 13 13 - 5 = 8 13 - 8 = 5 Bring two students up to practice the conver Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the give you examples of other doubles. Ask student other fact families.		
Math Vocabulary Word for Today: difference Description: The term difference is the word we use to describe the answer to a subtraction problem. The word is difference because it is very descriptive of the operation of subtraction. You start with a total, take some items away, and what you have left is the difference. Look at this problem: 7-5 = 2. The difference is 2. Create an entry in your Vocabulary Notebook for the word difference. Vocabulary Notebook Sample: New Word My Description		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students
difference Personal Connection	In subtraction the amount you have left when you subtract Drawing	acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
The difference of 12 – 4 is 8. In other words, 12 is 4 more than 8 or 8 more than 4.	12.4.= 8	
A word problem is a story that has math in it. When you hear a story problem you can write a number sentence to represent the math. An example of a story problem follows: Jorge had 7 cookies. His mother gave him 5 more. How many cookies does Jorge have now? A number sentence would look like this: 7 cookies + 5 cookies = 12 cookies. There are clues in the story. Words like now or all together tell us that we will add. If the word problem went like this: Jorge had 7 cookies. His mother ate 5 of them. How many cookies does Jorge have left? would tell us that the number sentence needs to look like this 7 – 5 = 2. When we work with word problems it is important to think about what question we are being asked. This makes it easier to know whether or not we add or subtract. Today we are going to work on writing stories to go with number sentences. For example if you read the number sentence: $7 - 5 = 2$, you would need to make up a story such as, Jorge has 7 balloons. 5 of them popped. How many does he have left? Do several examples with the students on the board.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Nur <u>Dire</u>	nber Sentences to Stories #2 ections:	
1.	Divide students into trios	
2.	Give each trio a Number Sentence Card	
3.	Together, students work out stories for each of the number sentences that they find on	
	the card.	
4.	Students may write or draw the stories.	
5.	After students have created stories for the 8 number sentences, bring group together	
	to share the stories for the different number sentences.	

Closing
Review
Say:
Please recap what we did today.
Did we achieve our objectives?
Debrief
What did you like about what we did today in math?
What would you like to do more of the next time we do math?
Give an example of how you will use what we did today in school tomorrow.

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Number Sentence Cards # 2

11 + 3 = 14	6 – 3 = 3	4 + 2 + 6 = 12	5 + 4 + 2 = 11
8 – 3 = 5	9 – 5 = 4	8 + 3 = 11	7 – 2 = 5



*Activity \rightarrow Teachable

Moment(s) throughout

Component	Math
Grade Level:	First Grade
Lesson Title:	Add Them Up #1
Focus:	Addition problems

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Focus Student's Prior Knowledge

What do you know about addition? What do you call an answer to an addition problem? How many numbers can you add together in an addition problem? (unlimited). What is the opposite of addition? When you add do you end up with more than you started with or less than you started with? Give an example of an addition problem.

Content (the "Meat")

Problem of the Day

Draw 4 groups of 4 apples. How many apples are there in all? Use your picture to explain.

Fact Practice	with students repeatedly.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	Check in about what is
and subtraction. The key is for children to learn that numbers have a relationship with one	happening and what they are
another in adding and subtracting. Fact practice will follow this pattern every day.	thinking.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any
They will write the problem in four ways.	teachable moments
1 + 2 = 3	Stop the class and focus on a
2 + 1 = 3	student's key learning or
3 – 2 = 1	understanding Ack open
3 – 1 = 2	anded questions to
After they have written the problem in all 4 ways they will find a partner and say,	determine what the rest of
"If 1 + 2 = 3, then 2 + 1 =3".	the group is thinking
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	
You should have them practice this conversation (exactly as it is written) with 3-5 other	when possible, engage
students every day. On the 5 th day, you will utilize all 4 problems from the days before, and	students in a "teach to learn"
the conversation will follow the pattern, but the second responder will need to quickly look	opportunity and have the
through his/her cards (of course we hope they remember without looking) and gives the	student become the teacher.
correct response.	
Today you will introduce this activity and begin with the Fact Family of 6, 9 and 15.	



Have students write the entire Fact Family or 6 + 9 = 15 9 + 6 = 15 15 - 6 = 9 15 - 9 = 6 Bring two students up to practice the converse Try it again with several other pairs of studen Then have children find a partner and practic Remember that today they are only doing the		
Math VocabularyWord for Today: addendDescription: The term addend is a word that we use to describe the numbers that we addtogether in an addition problem. In the problem $5 + 6 = 11, 5$ and 6 are the addends. Whatare the addends in these two problems: $3 + 2 = 5$ or $6 + 3 = 9$.Have children review the Vocabulary notebook for the word addend.		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a
New Word addend	My Description The two or more numbers that you add together are the addends	right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection In the number sentence 6 + 4 = 10, the 6 and the 4 are addends. That is how old I am.	Drawing	
Activity Addition Addition Addition Addition Addition Problems Sometimes addition problems have more than one digit in the numbers you are adding. For example, a problem might be something like this: 12 +7 The story behind the problem might be that Nancy had 12 eggs and then purchased 7 more. How many eggs does she have now? It is important to learn how to add problems like this. Add Them Up Directions: 1. Divide students in pairs 2. Give each pair as set of Add Them Up Cards and Game Board, a white board, pens/crayons 3. Shuffle the cards and put them to the right of the game board		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



4.	Player 1 draws a card, completes the addition and then finds the answer on the Game
	Board and covers it with a marker
_	

- 5. Player 2 repeats the process
- 6. Game is over when all of the answers are covered.

	Olasian
	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What is a cube?	
How many sides does a cube have?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Add Them Up

12	14	15	17	22
<u>+7</u>	<u>+4</u>	<u>+2</u>	<u>+1</u>	<u>+6</u>
24	26	27	31	33
<u>+3</u>	<u>+3</u>	<u>+2</u>	<u>+8</u>	<u>+2</u>
34	37	40	43	45
<u>+5</u>	<u>+ 1</u>	<u>+8</u>	<u>+2</u>	<u>+1</u>
53	52	56	60	61
<u>+5</u>	<u>+3</u>	<u>+1</u>	<u>+4</u>	<u>+7</u>
62	71	72	77	81
<u>+1</u>	<u>+6</u>	<u>+4</u>	<u>+2</u>	<u>+8</u>
84	87	90	91	93
<u>+3</u>	<u>+1</u>	+9	<u>+6</u>	<u>+3</u>



1st Grade Add Them Up Game Board

19	39	55	89	18
35	57	87	17	39
64	88	18	38	68
99	28	48	63	97
27	45	77	96	29
29	46	58	76	79



*Activity \rightarrow Teachable

Moment(s) *throughout*

Component	Math
Grade Level:	First Grade
Lesson Title:	Add Them Up #2
Focus:	Addition

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you call an answer to an addition problem? How many numbers can you add together in an addition problem? (unlimited). What is the opposite of addition? When you add do you end up with more than you started with or less than you started with?

Content (the "Meat")

Problem of the Day

Joan has 11 books. She gives 5 to a friend. How many books does she have left?

	During the lesson check in	
Fact Practice	with students repeatedly.	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Check in about what is happening and what they are thinking. Take advantage of any teachable moments.	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
Today you will introduce this activity and begin with the Fact Family of 6, 7 and 13.		





Have students write the entire Fact Family o 6 + 7 = 13 7 + 6 = 13 13 - 6 = 7 13 - 7 = 6 Bring two students up to practice the convert Try it again with several other pairs of studen Then have children find a partner and practice Remember that today they are only doing the		
Math V Word for today: minus Description: Minus is a term we use in a su something away from the total. When you m Minus is a word that means you are reducing	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.	
Review the entry for the word minus that is in Vocabulary Notebook Sample :	n your Vocabulary notebook.	When possible, have students experience the word (Ex. 4 students creating a
New Word minus	My Description Subtraction, take away, difference are terms that go with the word minus which means less that it was to begin with	right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection I had twelve rocks and I gave 2 away, so now I have 10. Ten is the difference of 12 minus 2.	Drawing	
Addition Problems Sometimes addition problems have more that example, a problem might be something like The story behind the problem might be that I more. How many eggs does she have now? It is important to learn how to add problems Add Them Up	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	
 Directions: Divide students in pairs Give each pair as set of Add Them Up pens/crayons Shuffle the cards and put them to the right. Player 1 draws a card, completes the additional completes the additio		



Board and covers it with a marker

- 5. Player 2 repeats the process
- 6. Game is over when all of the answers are covered.

	Closing	
	Review	
Say:		
Please recap what we did today.Did we achieve our objectives?		
	Debrief	
What did you like about what we did today in math?		
What do you know about a calendar?		
What are the names of the month?		
What are the names of the days of the week?		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Add Them Up

12	14	15	17	22
<u>+7</u>	<u>+4</u>	<u>+2</u>	<u>+1</u>	<u>+6</u>
24	26	27	31	33
<u>+3</u>	<u>+3</u>	<u>+2</u>	<u>+8</u>	<u>+2</u>
34	37	40	43	45
<u>+5</u>	<u>+ 1</u>	<u>+8</u>	<u>+2</u>	<u>+1</u>
53	52	56	60	61
<u>+5</u>	<u>+3</u>	<u>+1</u>	<u>+4</u>	<u>+7</u>
62	71	72	77	81
<u>+1</u>	<u>+6</u>	<u>+4</u>	<u>+2</u>	<u>+8</u>
84	87	90	91	93
<u>+3</u>	<u>+1</u>	+9	<u>+6</u>	+3



1st Grade Add Them Up Game Board

19	39	55	89	18
35	57	87	17	39
64	88	18	38	68
99	28	48	63	97
27	45	77	96	29
29	46	58	76	79


Component	Math
Grade Level:	First Grade
Lesson Title:	Student Activity Choice
Focus:	Review

Materials:

White boards Crayolas Socks (use for erasers) Materials for games played the past 10 days

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Ask children what they know about addition. Ask them to share what they do to write number sentences? Ask them about story problems and how they connect to number sentences?

Content (the "Meat")	
Problem of the Day If Joe went to the park at 2:00 and he plays for 2 hours. What time is it when he goes	*Activity → Teachable Moment(s) <i>throughout</i>
home? Fact Practice	During the lesson check in with students repeatedly.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Take advantage of any teachable moments.
1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 6, 8 and 14.	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
Have students write the entire Fact Family on the white board. 6 + 8 = 14	



8 + 6 = 14	
14 – 6 = 8	
14 – 8 = 6	
Bring two students up to practice the conversation.	
Try it again with several other pairs of students.	
Then have children find a partner and practice the conversation. Do this at least 4 times.	
Remember that today they are only doing the Fact Family of 6, 8 and 14.	
Activity	Focus on having young
Activity Today is review day. Students will be able to select from the Fraction Games you played	Focus on having young people "compete" in pairs or
Activity Today is review day. Students will be able to select from the Fraction Games you played for the last 10 days. Ask students to select from:	Focus on having young people "compete" in pairs or small groups. Once a game
Activity Today is review day. Students will be able to select from the Fraction Games you played for the last 10 days. Ask students to select from: Tri Add	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it
Activity Today is review day. Students will be able to select from the Fraction Games you played for the last 10 days. Ask students to select from: Tri Add Add 'Em	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is
Activity Today is review day. Students will be able to select from the Fraction Games you played for the last 10 days. Ask students to select from: Tri Add Add 'Em Story Problems	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Activity Today is review day. Students will be able to select from the Fraction Games you played for the last 10 days. Ask students to select from: Tri Add Add 'Em Story Problems Number Sentence Stories	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Activity Today is review day. Students will be able to select from the Fraction Games you played for the last 10 days. Ask students to select from: Tri Add Add 'Em Story Problems Number Sentence Stories Add Them Up	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

	Closing
	Review
Say:	
• Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
Which of the games did you enjoy playing the most?	
What about this game is fun for you?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	First Grade
Lesson Title:	This Is The Sum #1
Focus:	Addition

Materials:

White boards Crayolas Socks (for erasers) deck of cards

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: Jorge has 5 marbles. He wins 4 marbles. How many does he have altogether?

Content (the "Meat")			
Problem of the Day Look at the domino below. Write a number sentence to show how many dots are on the	*Activity → Teachable Moment(s) <i>throughout</i>		
domino. Explain your answer.	During the lesson check in with students repeatedly.		
	Check in about what is happening and what they are thinking.		
	Take advantage of any teachable moments.		
	Stop the class and focus on a		
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1+2=3$ $2+1=3$ $3-2=1$ $3-1=2$	student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.		
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".			



The other student will respond with "Yes, a You should have them practice this conversion students every day. On the 5 th day, you will the conversation will follow the pattern, but through his/her cards (of course we hope the correct response. Today you will introduce this activity and be Have students write the entire Fact Family 3 + 7 = 10 7 + 3 = 1- 10 - 3 + 7 10 - 7 = 3 Bring two students up to practice the convect Try it again with several other pairs of stude Then have children find a partner and practice Remember that today they are only doing the		
Math	Vocabulary	It is important to review
Word for Today: plus		often throughout the day
Description: The term plus means addition with and you are going to add something to	n. It means that you have something to start it. When we read an addition problem we say 5	Complete the Vocabulary
plus 4 equals 9. We write it this way: $5 + 4$		notebook for each word.
Create an entry for "plus" in your Vocabula	y Notebook. Talk with a partner about what this	When possible, have
word means. Use it in a sentence.		(Ex. 4 students creating a
Vocabulary Notebook Gample.		right angle, multiple students
New Word	My Description	acting out an equation).
pluc	Adding two things together is done when you	Vocabulary Notebooks can be made from ½ of a
pius	say this plus this	composition book.
	, I	
Personal Connection	Drawing	
It is easier to do a plus problem than a		
minus problem		
Students will complete this notebook for ea		
A	Focus on having young	
A	ddition	people "compete" in pairs or small groups. Once a game
Addition		is mastered you can utilize it
Addition is the math operation that has you	in the "When Homework Is	
For example it you have the following:		



you could simply count the happy faces. Or you count the number of faces in the first box (6) and the number in the second box (8) and write the math problem $6 + 8 = 0$	
6	
+8	
No matter which way you do the problem, the total number of happy faces is 14. If students are struggling with addition problems, they should draw the problem. This obviously becomes cumbersome when the numbers are large, but can be helpful when learning the process.	
Work 8-10 problems on the board with the students. Encourage students to complete the problems on their own white board, showing the answers that he/she has.	
This Is The Sum	
Directions:	
1. Divide students into pairs.	
 Give each pair a deck of cards with face cards, jokers, and 10s removed, and a white board. 	
3. Shuffle the cards and deal them out equally to the two players.	
4. Player places his/her cards face down in front of him/her.	
5. Each player turns over a card and the pair writes the equation on the white board with the correct total.	
6. Play is over when pair has 15 problems.	

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief
What did you like about what we did today in math?
What would you like to do more of the next time we do math?
What does it mean when we say we found an answer by addition?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	First Grade
Lesson Title:	This Is The Sum #2
Focus:	Addition

Materials:

White boards Crayolas

Socks (for erasers)

deck of cards

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: Joni has 5 bows for her hair. Lori has 9 bows. How many bows do they have together?

Content (the "Meat")

Problem of the Day

If John has 10 red crayons and 2 blue crayons in a baggie and without looking he reaches in and takes out one of the crayons, what color is he most likely to pull out? How do you know?

Fact Practice

Fact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.

1 + 2 = 3

2 + 1 = 3

3 - 2 = 1

3 – 1 = 2

After they have written the problem in all 4 ways they will find a partner and say,

"If 1 + 2 = 3, then 2 + 1 = 3".

The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking.

Take advantage of any teachable moments.

Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



Today you will introduce this activity and be Have students write the entire Fact Family of		
4 +7 = 11 7 · 4 - 11		
7 + 4 = 11 11 - 4 = 7		
11 - 7 = 4		
Bring two students up to practice the conver	sation.	
Try it again with several other pairs of stude	nts.	
Then have children find a partner and practi	ce the conversation. Do this at least 4 times.	
Remember that today they are only doing the	e Fact Family of 4, 7 and 11.	
Math \	/ocabulary	It is important to review
Word for Today: equal		academic math vocabulary
Description: The term equal means that tw	vo things have the same value. 3 + 6 has the	Complete the Veeebuler
same value as $4 + 5$. Both of these equation	ns equal 9. An equal sign is two short lines	Complete the vocabulary
written one on top of the other. The symbol	signals that two things are the same.	
Now Word	My Description	students experience the word
	My Description	(Ex. 4 students creating a
equal	5 + 3 and 6 + 2 have equal value	right angle, multiple students acting out an equation).
Personal Connection	Drawing	Vocabulary Notebooks can
	5	be made from ½ of a
These two sums are equal.		composition book.
Students will complete this notebook for eac	ch vocabulary word that they are given.	
Α	ctivity	Focus on having young
Ad	ldition	people "compete" in pairs or
		small groups. Once a game
Addition		is mastered you can utilize it
Addition is the math operation that has you	combine two numbers or two groups of items.	Complete" center
For example if you have the following:		
]	
]	
you could simply count the happy faces. Or		
(6) and the number in the second box (8), and write the math problem $6 + 8 = 0$ or		
no matter which way you do the problem, the		
becomes cumbersome when the numbers a		
process.		



Work 8-10 problems on the board with the students. Encourage students to complete the problems on their own white board, showing the answers that he/she has.	
This Is The Sum	
Directions:	
1. Divide students into pairs.	
Give each pair a deck of cards with face cards, jokers, and 10s removed, and a white board.	
3. Shuffle the cards and deal them out equally to the two players.	
4 Player places his/her cards face down in front of him/her	
E Fach places turns over a cord and the pair writes the equation on the white heard	
with the correct total.	
6. Play is over when pair has 15 problems.	

CI	osing
R	eview
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
De	ebrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do math	?
What is a number?	
What is a letter?	
Are they the same?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



*Activity \rightarrow Teachable Mamont(a) throughout

Component	Math
Grade Level:	First Grade
Lesson Title:	What's the Difference? #1
Focus:	Subtraction

Materials:

White boards Cravolas

Activity at the end of the lesson plan

Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtraction? What do you call the answer to a subtraction problem? There is a sign that indicates subtraction. What do you call that sign? How do the words "take away" and "minus" used in a subtraction problem? What strategies do you used to subtract?

Content (the "Meat")

Problem of the Day Joe has 9 cookies. He eats 3 cookies. How many cookies does he have left? Explain your a

Joe has 9 cookies. He eats 3 cookies. How many cookies does he have left? Explain you	woment(s) <i>inroughout</i>
answer.	During the lesson check in
Fact Practice	with students repeatedly.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking.
They will write the problem in four ways. 1 + 2 = 2	Take advantage of any teachable moments.
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
Today you will introduce this activity and begin with the Fact Family of 5, 7, and 12.	



Have students write the entire Fact Family of 5 + 7 = 12 7 + 5 = 12 12 - 5 = 7 12 - 7 = 5 Bring two students up to practice the convert Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the students that this fact is a double—the adde		
Math V Word for Today: minus Description: The term minus refers to the sign straight line. When you minus one number for by the second number that you say after the like this: 5 minus 3 equals 2. We would write Have children complete the Vocabulary note Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a	
New Word My Description minus Minus means to make less by a certain number		right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
Personal Connection I am 8 years old. My brother is 3. 8 – 3 = 5, and I am 5 years older. Students will complete this notebook for eac		
Ac	ctivity	Focus on having young
Subtraction Subtraction is a math operation that begins we that total. The difference is what is left AFTE objects. If you start with 9 happy faces and placed in the second box, the subtraction probox. $ \begin{array}{c c c c c c c c c c c c c c c c c c c $	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	



9 <u>-6</u> 3

Subtraction is the reciprocal of addition. Instead of trying to find the total, you know the total and are trying to find the difference in the total if you remove several of the objects from the group.

Rather than demonstrating this with white boards and erasing objects, have the students use small Post-Its. Draw a circle on the white board. Ask students to give you a number of Post-Its to use under 20. Place that number of Post-Its in the circle. Count them and write the number under the circle. Draw a second circle to the right of the first, and ask students how many of the Post-Its from the first circle they would like to move to the second circle. Physically move those Post-Its and write the number underneath the second circle. Now ask the students how many Post-Its are left in the original circle. This then becomes the difference. Write each of the subtraction problems in the horizontal and vertical form after you have done the manipulation with the Post-Its.

What's The Difference? Directions:

- 1. Divide students into pairs.
- Give each pair a What's The Difference Problem Board and piece of blank paper. (Note: If you want to use the game board more than one, laminate or put in a sheet protector)
- 3. Have students fold the paper until they have 8 spaces on one side and 8 on the other. (This will become the paper they write the problems on.)
- 4. Working together, the pair follows the directions on the Problem Board and then writes the subtraction problem on the blank paper, one problem per box.
- 5. When pair is finished, they share their problems with another pair and compare.

Closing	
Review	
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
Debrief	
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
What is a cylinder?	
Where can you see them in the world?	

Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.

2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)



- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade What's The Difference

Cross out 4 hearts	Cross out 3 happy faces	Cross out 2 suns	Cross out 5 spades
* * * * *		$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} $	
* * * * *	$\bigcirc \bigcirc $	$\begin{array}{c} \varphi & \varphi & \varphi & \varphi \\ \varphi & \varphi & \varphi & \varphi \\ \varphi & \varphi &$	
* * * * *	\bigcirc	\$ \$ \$ \$ \$	
Write the problem	Write the problem	Write the problem	Write the problem
Cross out 0 hearts	Cross out 8 happy faces	Cross out 7 suns	Cross out 8 spades
* * * * *		$\ddot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot$	
* * * *	$\bigcirc \bigcirc $	\$ \$ \$ \$ \$ \$ \$	
	$\bigcirc \bigcirc $	\$ \$ \$ \$ \$	
Write the problem	$\bigcirc \bigcirc $		Write the problem
	Write the problem	Write the problem	'
Cross out 5 hearts	Cross out 6 happy faces	Cross out 1 sun	Cross our 6 spades
* * * * *		*****	
* * * * *		*****	
* * *	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	$\dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla}$	
Write the problem			Write the problem
	Write the problem	Write the problem	
Cross out 9 hearts	Cross out 4 happy faces	Cross out 8 suns	Cross out 3 spades
* * * * *	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	$\dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} \dot{\nabla} $	
* * * * *	$\bigcirc \odot \odot \odot \odot \odot \odot$	\$ \$ \$ \$ \$ \$ \$	
* * *	$\bigcirc \bigcirc $	\$ \$ \$ \$ \$ \$ \$ \$	
Write the problem			Write the problem
	Write the problem	Write the problem	•

Component	Math
Grade Level:	First Grade
Lesson Title:	What's The Difference? #2
Focus:	Subtraction

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Activity at the end of the lesson plan
Socks (for erasers)	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtraction? What does the word, "minus" mean and have to do with subtraction? What do the words difference and take away have to do with subtraction? Please write a number sentence that shows this story: Joe has 8 ice cream bars. Frank ate 3 of the ice cream bars. How many ice cream bars does Joe have left?

Content (the "Meat")			
Problem of the Day Look at the following 4 problems. How many of them have the same sum? How do you	*Activity → Teachable Moment(s) <i>throughout</i>		
know?	During the lesson check in with students repeatedly.		
5 + 5 = 6 + 4 = 3 + 6 = 8 + 2 =	Check in about what is happening and what they are thinking.		
	Take advantage of any teachable moments.		
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.		
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".			





You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 6, 7, and 13. Have students write the entire Fact Family on the white board. 6 + 7 = 13 7 + 6 = 13 13 - 6 = 7 13 - 7 = 6 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times.			
	Math V	/ocabulary	It is important to review
Word for Today: difference			academic math vocabulary
Description : The term difference	is the wo	rd we use to talk about the answer in an	often throughout the day.
subtraction problem. When you su	btract the	e numbers 9 - 6 you will have a difference of 3.	Complete the Vocabulary
This answer is the difference. Cor	nplete an	entry for sum in your Vocabulary Notebook.	notebook for each word.
			When possible, have
Vocabulary Notebook Sample:	r		Students experience the word
New Word		My Description	right angle, multiple students
difference the answer when you subtract		acting out an equation). Vocabulary Notebooks can	
Personal Connection		Drawing	composition book
The difference between 9 and 6 is three.			
Students will complete this notebo	ok for eac	h vocabulary word that they are given.	
	Α	ctivity	Focus on having young
	Sub	traction	people "compete" in pairs or
Subtraction Subtraction is a math operation that begins with a total number and then removes part of that total. The difference is what is left AFTER you have removed a certain number of objects. If you start with 9 happy faces and you remove 6 happy faces (the number being placed in the second box, the subtraction problem will tell you how many are left in the first box.			small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
$ \rightarrow \odot$			
$ (\bigcirc \bigcirc \bigcirc \bigcirc) \qquad (\bigcirc) \rightarrow $			



The problem is written: 9 - 6 = 3 or

Subtraction is the reciprocal of addition. Instead of trying to find the total, you know the total and are trying to find the difference in the total if you remove several of the objects from the group.

Rather than demonstrating this with white boards and erasing objects, have the students use small Post-Its. Draw a circle on the white board. Ask students to give you a number of Post-Its to use under 20. Place that number of Post-Its in the circle. Count them and write the number under the circle. Draw a second circle to the right of the first, and ask students how many of the Post-Its from the first circle they would like to move to the second circle. Physically move those Post-Its and write the number underneath the second circle. Now ask the students how many Post-Its are left in the original circle. This then becomes the difference. Write each of the subtraction problems in the horizontal and vertical form after you have done the manipulation with the Post-Its.

What's The Difference? Directions:

- 1. Divide students into pairs.
- Give each pair a What's The Difference Problem Board and piece of blank paper. (Note: If you want to use the game board more than one, laminate or put in a sheet protector)
- 3. Have students fold the paper until they have 8 spaces on one side and 8 on the other. (This will become the paper they write the problems on.)
- 4. Working together, the pair follows the directions on the Problem Board and then writes the subtraction problem on the blank paper, one problem per box.
- 5. When pair is finished, they share their problems with another pair and compare.

	Closing
	Review
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
How can you use the information from today in school to	omorrow?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one



particular way which was new to them. (Tweak)

4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade What's The Difference

Cross out 4 hearts	Cross out 3 happy faces	Cross out 2 suns	Cross out 5 spades
 * * * * * * * * * * * * * * * Write the problem Cross out 0 hearts 	 ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ Write the problem Cross out 8 happy faces 	☆☆☆☆☆ ☆☆☆☆ Write the problem Cross out 7 suns	 A A A A Write the problem Cross out 8 spades
 Write the problem 		☆☆☆☆☆ ☆☆☆☆☆ ☆☆☆☆☆	 <
Cross out 5 hearts	Cross out 6 happy faces	Cross out 1 sun	Cross our 6 spades
 * * * * * * * * * * * * * * Write the problem 	Image:	☆☆☆☆☆ ☆☆☆☆☆ ☆☆☆☆	 ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ Write the problem
Cross out 9 hearts	Cross out 4 happy faces	Cross out 8 suns	Cross out 3 spades
 * * * * * * * * * * * * * * Write the problem 	 ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ Write the problem 	☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ Write the problem	 <



Component	Math	
Grade Level:	ïrst Grade	
Lesson Title:	What's My Number? #1	
Focus:	Subtraction	

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What steps do you take to find the right answer to a subtraction problem? What do you call the answer to a subtraction problem? Write a number sentence that shows that you are subtracting. Now write a story about the number sentence. Share it with a peer.

Content (the "Meat")	
Problem of the Day Jill has 7 dolls. She receives 2 for her birthday. How many dolls does she have now?	*Activity → Teachable Moment(s) <i>throughout</i>
Explain your thinking. Fact Practice	During the lesson check in with students repeatedly.
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Check in about what is happening and what they are thinking.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	Take advantage of any teachable moments.
1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If 1 + 2 = 3, then 2 + 1 = 3". The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
Today you will introduce this activity and begin with the Fact Family of 8, 7 and 15. Have students write the entire Fact Family on the white board.	



8 + 7 = 15 7 + 8 = 15			
15 - 8 = 7			
15 - 7 = 8 Bring two students up to practice the conv	ersation		
Try it again with several other pairs of stud	lents.		
Then have children find a partner and prac	ctice the conversation. Do this at least 4 times.		
Remember that today they are only doing	the Fact Family of 8, 7 and 15.		
Math Word for today: subtraction Description: The term subtraction refers total and then take some of it away an	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary		
Subtraction is the opposite of addition.	to be all four the surged counter at	notebook for each word.	
Have children complete the vocabulary no	tedook for the word context.	vvnen possible, nave	
New Word	My Description	(Ex. 4 students creating a	
subtraction	taking something away from a total	right angle, multiple students acting out an equation).	
Subtraction	taking something away norma total	Vocabulary Notebooks can	
Personal Connection	Drawing	be made from ½ of a composition book.	
I like to do subtraction problems.	subtract		
	JUNICUL		
รเ	Focus on having young people "compete" in pairs or small groups. Once a game		
Subtraction Sometimes using a number line to subtractive moving backwards (or toward zero).	is mastered you can utilize it in the "When Homework Is Complete" center.		
To work on a number line, you position your pencil or marker on the first number in the problem (the minuend). You then move toward the 0 the number of spaces indicated by the second number (the subtrahend), and the number you land on is the answer (the difference). It is important to give children the vocabulary to talk through the subtraction problem.			
Draw a number line on the white board or chart paper that moves from 0 to 10. Using the number line, begin on the minuend, hop or move backwards the number indicated by the minuend, and then find the difference. Write the problem horizontally. Complete several problems with the students before having them work on their own.			
 What's My Number? <u>Directions:</u> 1. Divide students into pairs. 2. Give each pair a number line and also need a white board. 3. Together, pair draws a What's My 	a set of What's My Number cards. Students will Number card and then uses the number line to		



solve the problem.

- 4. When they have solved the problem, they should record it on the white board.
- 5. When pair is finished they should share their problems with another pair of students.

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief
What did you like about what we did today in math?
What would you like to do more of next time?
What are the different shapes that you made with the marshmallows and toothpicks
Where can you find those shapes in the world?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





1st Grade What's My Number

5 – 2 =	4 – 2 =	6 – 3 =	6 – 4 =
9 – 3 =	9 – 2 =	7 – 5 =	7 – 3 =
8 – 6 =	8 – 2 =	8 – 4 =	8 – 5 =
8 – 3 =	9 – 7 =	9 – 6 =	9 – 5 =
4 – 4 =	8 – 8 =	7 – 4 =	7 – 1 =
6 – 2 =	5 – 3 =	5 – 4 =	7 – 6 =
9 – 8 =	8 – 7 =	9 – 1 =	1 – 1 =









Component	Math	
Grade Level:	First Grade	
Lesson Title:	What's My Number? #2	
Focus:	Subtraction	

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What steps do you take to find the right answer to a subtraction problem? What do you call the answer to a subtraction problem? Write a number sentence that shows that you are subtracting. Now write a story about the number sentence. Share it with a peer.

	Content (the "Meat")							
					Proble	em of th	ne Day	*Activity → Teachable Moment(s) <i>throughout</i>
Look a is the c	t the ca late of	alendar your bir	below. thday?	lf it is f Explai	the 11 th in your	of the lanswer	month and your birthday is in 5 days, what	During the lesson check in with students repeatedly.
S	M 1	T 2	W 3	T 4	F 5	S 6		Check in about what is happening and what they are thinking.
7	8 15	9 16	10 17	11 18	12 19	13 20		Take advantage of any teachable moments.
21 28	22 29	23 30	24	25	26	27		Stop the class and focus on a student's key learning or understanding. Ask open-
Fact P and su anothe Childre They w	Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.1 + 2 = 3 $2 + 1 = 3$ $3 - 2 = 1$ Note that the teacher.							



3-1=2 After they have written the problem in all 4 "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, a You should have them practice this conver- students every day. On the 5 th day, you with the conversation will follow the pattern, but through his/her cards (of course we hope the correct response. Today you will introduce this activity and b Have students write the entire Fact Family 7 + 9 = 16 9 + 7 = 16 16 - 7 = 9 16 - 9 = 7 Bring two students up to practice the conver- Try it again with several other pairs of stude Then have children find a partner and pract Remember that today they are only doing the	ways they will find a partner and say, nd since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". sation (exactly as it is written) with 3-5 other II utilize all 4 problems from the days before, and the second responder will need to quickly look hey remember without looking) and gives the egin with the Fact Family of 7, 9 and 16. on the white board. ersation. ents. tice the conversation. Do this at least 4 times. he Fact Family of 7, 9, and 16.	
Math	Vocabulary	It is important to review
Word for today: number sentence		
Description: The term number sentence in demonstrates the math for the story we rea = 5 is a number sentence. The story is this friend. How many cookies does Judy have Judy has 9 flowers. She gave 4 to her gran left?	often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a	
Review the entry in your Vocabulary Noteb anything that you think is important.	right angle, multiple students acting out an equation). Vocabulary Notebooks can	
Vocabulary Notebook Sample:		be made norm /2 of a
New Word	My Description	composition book.
number sentence	Number sentences tell you how numbers are related	
Personal Connection	Drawing	
I had 8 pieces of candy. I game my sister 2 pieces. Now I have 6 pieces left.	8-2=6	
A	Activity	Focus on having young
Subtraction		people "compete" in pairs or
Sometimes using a number line to subtract	small groups Once a game	
be moving backwards (or toward zero).	The management of the ting for word, you would	is mastered you can utilize it



To work problem second differenc problem	on a number line, you position your pencil or marker on the first number in the (the minuend). You then move toward the 0 the number of spaces indicated by the number (the subtrahend), and the number you land on is the answer (the se). It is important to give children the vocabulary to talk through the subtraction .	in the "When Homework Is Complete" center.
Draw a number minuenc problem	number line on the white board or chart paper that moves from 0 to 10. Using the line, begin on the minuend, hop or move backwards the number indicated by the I, and then find the difference. Write the problem horizontally. Complete several s with the students before having them work on their own.	
What's Directio 1. 2.	My Number? <u>ns:</u> Divide students into pairs. Give each pair a number line and a set of What's My Number cards. Students will	
3.	also need a white board. Together, pair draws a What's My Number card and then uses the number line to solve the problem.	
4. 5.	When they have solved the problem, they should record it on the white board. When pair is finished they should share their problems with another pair of students.	

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief nath?

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

What are the different shapes that you made with the marshmallows and toothpicks

Where can you find those shapes in the world?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





1st Grade What's My Number

5 – 2 =	4 – 2 =	6 – 3 =	6 – 4 =
9 – 3 =	9 – 2 =	7 – 5 =	7 – 3 =
8 – 6 =	8 – 2 =	8 – 4 =	8 – 5 =
8 – 3 =	9 – 7 =	9 – 6 =	9 – 5 =
4 – 4 =	8 – 8 =	7 – 4 =	7 – 1 =
6 – 2 =	5 – 3 =	5 – 4 =	7 – 6 =
9 – 8 =	8 – 7 =	9 – 1 =	1 – 1 =









Component	Math
Grade Level:	First Grade
Lesson Title:	Decoder Clues #1
Focus:	Subtraction

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtraction? Give a number sentence that gives a subtraction problem. Tell the story that goes with this number sentence. Share with a peer. Do the same thing all over again. What does the word difference mean? In your number sentence, which number is the minuend? Which is the subtrahend?

Content (the "Meat")					
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>				
John has a quarter. Joan has a dime. Which one has the most money? Explain your answer.	During the lesson check in with students repeatedly.				
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.				
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.				
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-ended questions to				
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	determine what the rest of the group is thinking.				
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.				
Today you will introduce this activity and begin with the Fact Family of 3, 8 and 11.					



Have students write the entire Fact Family on th 3 + 8 = 11 8 + 3 = 11 11 - 3 = 8 11 - 8 = 3 Bring two students up to practice the conversati Try it again with several other pairs of students. Then have children find a partner and practice the Remember that today they are only doing the Fa			
Math Voca Word for Today: minuend Description: The term minuend is used to desc you are subtracting from. In a number sentence problem. In the problem, $6 - 2 = 4$, the 6 is the Have children revisit the entry in the Vocabulary Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a		
New Word minuend	My Description the number you subtract from	acting out an equation). Vocabulary Notebooks can be made from ½ of a	
Personal Connection In the number sentence 9 – 3 = 6, 9 is the minuend.	Drawing $-3 = 6$	composition book.	
Activity Subtraction Subtraction is a math operation that begins with that total. The difference is what is left AFTER y objects. If you start with 9 happy faces and you placed in the second box, the subtraction proble box. $(\bigcirc \bigcirc $	ity ction In a total number and then removes part of you have removed a certain number of remove 6 happy faces (the number being em will tell you how many are left in the first	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	



Subtraction is the reciprocal of addition. Instead of trying to find the total, you know the total and are trying to find the difference in the total if you remove several of the objects from the group.	
Review several subtraction problems with the students. Have them write them on a white board while you write them on chart paper or a large white board. Work through the process, reminding students of the number line and the Post-Its. Explain the today the subtraction problems will give them the clues they need to find an answer to a riddle.	
Decoder Clues	
<u>Directions:</u>	
 Divide Students into pairs. Give each pair a Decoder Clues problem sheet and white heards. 	
 Give each pair a Decoder Glues problem sheet and write boards. Working together, pairs complete each of the problems. 	
4 When the problems are completed, pair should take the letter of the problem and	
plug the letters into the riddle card.	
5. If the problems were completed correctly, the answer to the riddle will be obvious.	
(Not all letters may be used in the answer).	

(Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about today's lesson?	
How can you use the information from today during class t	tomorrow?
What is one key learning you had today in math?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Decoder Clues

R	E	Р	V	L
8	9	6	10	9
<u>- 7</u>	<u>- 6</u>	<u>-1</u>	<u>- 2</u>	<u>-2</u>
S	В	Т	Р	Q
9	8	10	7	11
<u>-9</u>	<u>- 4</u>	<u>-4</u>	<u>-5</u>	<u>-2</u>
0	U	Ν	Α	G
18	12	15	14	17
<u>-5</u>	<u>-2</u>	<u>- 3</u>	<u>- 3</u>	<u>- 3</u>



Riddle for Day #7

0	Ę	5	1	3	1	2	1	4		3
			4	1	3	2	1			
0	Q	9	1	0	1	1	,	1		3
	2	1	1	1	2	(ò	()	

Note: Do not give children then answer below. Who's yellow and square and lives under the sea? Sponge Bob Square Pants



Component	Math
Grade Level:	First Grade
Lesson Title:	Decoder Clues #2
Focus:	Subtraction

Materials:

White boards Cravolas Activity at the end of the lesson plan

Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtraction? Give a number sentence that gives a subtraction problem. Tell the story that goes with this number sentence. Share with a peer. Do the same thing all over again. What does the word difference mean? In your number sentence, which number is the minuend? Which is the subtrahend?

Content (the "Meat") Problem of the Day *Activity \rightarrow Teachable Moment(s) *throughout* Which of the following numbers is an odd number? Explain how you know. During the lesson check in with students repeatedly. 4, 16, 10, 7 Check in about what is happening and what they are Fact Practice thinking. Fact Practice for 1st grade is looking at number families, so you are looking at both addition Take advantage of any and subtraction. The key is for children to learn that numbers have a relationship with one teachable moments. another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) Stop the class and focus on a They will write the problem in four ways. student's key learning or 1 + 2 = 3understanding. Ask open-2 + 1 = 3ended questions to 3 - 2 = 1determine what the rest of 3 - 1 = 2the group is thinking. After they have written the problem in all 4 ways they will find a partner and say, When possible, engage " $\int 1 + 2 = 3$. then 2 + 1 = 3". students in a "teach to learn" The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". opportunity and have the You should have them practice this conversation (exactly as it is written) with 3-5 other student become the teacher. students every day. On the 5th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to guickly look through his/her cards (of course we hope they remember without looking) and gives the



correct response. Today you will introduce this activity and be Have students write the entire Fact Family of 4 + 8 = 12 8 + 4 = 12 12 - 4 = 8 12 - 8 = 4 Bring two students up to practice the converting Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing th give you examples of doubles. Ask students families.				
Math V Word for Today: difference Description: The term difference is the word subtraction problem. The word is difference of subtraction. You start with a total, take so difference. Look at this problem: 7-5 = 2. Review the entry in your Vocabulary Notebook friend. Vocabulary Notebook Sample: New Word	Tocabulary Ind we use to describe the answer to a because it is very descriptive of the operation ome items away, and what you have left is the The difference is 2. ok for the word difference. Share it with a My Description	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students		
difference Personal Connection	In subtraction the amount you have left when you subtract Drawing	Vocabulary Notebooks can be made from ½ of a composition book.		
The difference of 12 – 4 is 8. In other words, 12 is 4 more than 8 or 8 more than 4.	12-4=8			
SubtractionSubtraction is a math operation that beginsSubtraction is a math operation that beginsthat total. The difference is what is left AFTEobjects. If you start with 9 happy faces andplaced in the second box, the subtraction probox. \bigcirc <	traction with a total number and then removes part of ER you have removed a certain number of you remove 6 happy faces (the number being oblem will tell you how many are left in the first	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.		



The problem is written: 9 - 6 = 3 or 9 <u>-6</u> 3 Subtraction is the reciprocal of addition. Instead of trying to find the total, you know the total and are trying to find the difference in the total if you remove several of the objects from the group. Review several subtraction problems with the students. Have them write them on a white board while you write them on chart paper or a large white board. Work through the process, reminding students of the number line and the Post-Its. Explain the today the subtraction problems will give them the clues they need to find an answer to a riddle. **Decoder Clues** Directions: 1. Divide students into pairs. 2. Give each pair a Decoder Clues problem sheet and white boards. 3. Working together, pairs complete each of the problems. 4. When the problems are completed, pair should take the letter of the problem and plug the letters into the riddle card. 5. If the problems were completed correctly, the answer to the riddle will be obvious. (Not all letters may be used in the answer).

Closing
Review
Say:
 Please recap what we did today. Did we achieve our objectives?
Debrief
What did you like about what we did today in math?
What would you like to do more of the next time we do math?
Give an example of how you will use what we did today in school tomorrow

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.


1st Grade Decoder Clues

R	E	Р	V	L
8	9	6	10	9
<u>- 7</u>	<u>- 6</u>	<u>-1</u>	<u>- 2</u>	<u>-2</u>
S	В	Т	Р	Q
9	8	10	7	11
<u>-9</u>	<u>- 4</u>	<u>-4</u>	<u>-5</u>	<u>-2</u>
0	U	Ν	Α	G
18	12	15	14	17
<u>-5</u>	<u>-2</u>	<u>- 3</u>	<u>- 3</u>	<u>- 3</u>



Riddle for Day #8

0	9	10	11	1	3
	13	8	11	7	

Note: Do not give students the answer to the riddle listed below. Two common shapes: Oval and Square



Component	Math
Grade Level:	First Grade
Lesson Title:	Add 'Em Up #1
Focus:	Addition

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Focus Student's Prior Knowledge

What do you know about addition? What do you call an answer to an addition problem? How many numbers can you add together in an addition problem? (unlimited). What is the opposite of addition? When you add do you end up with more than you started with or less than you started with? Give an example of an addition problem.

Content (the "Meat")				
Problem of the Day Draw a clock to show what it looks like when you go to lunch at 11:30.	*Activity → Teachable Moment(s) <i>throughout</i>			
Draw a clock to show what it looks like when you go to lunch at 11:30. Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response	Moment(s) throughout During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.			
Today you will introduce this activity and begin with the Fact Family of 5, 8 and 13. Have students write the entire Fact Family on the white board.				



5 + 8 = 13 8 + 5 = 13 13 - 8 = 5 13 - 5 = 8 Bring two students up to practice the converse Try it again with several other pairs of studen Then have children find a partner and practice Remember that today they are only doing the	ation. ts. e the conversation. Do this at least 4 times. e Fact Family of 5, 8, and 13.	
Math Vo	ocabulary	It is important to review
Word for Today: addend Description: The term addend is a word that together in an addition problem. In the proble are the addends in these two problems: 3 + 3 Have children review the Vocabulary noteboor	academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a	
Vocabulary Notebook Sample:	My Description	right angle, multiple students
new word addend	My Description The two or more numbers that you add together are the addends	acting out an equation). Vocabulary Notebooks can be made from $\frac{1}{2}$ of a composition book.
Personal Connection	Drawing	
In the number sentence 6 + 4 = 10, the 6 and the 4 are addends. That is how old I am.	6+4	
Ac	tivity	Focus on having young
Addition Addition Sometimes when we add we have numbers that have more than one digit. We can add 2 digit numbers, for example: 31 $+ 22$ 53		people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Students will add the two digits in the ones of the add the 2 digits that are in the tens place tens place. In the problem above, the answe Work through 8 – 10 problems with the childr tens add up to more than 9. This is a lesson After working through the problems with the s move forward on their own, distribute the gar Add 'Em Up		

Directions:

- 1. Divide students into pairs.
- 2. Give each pair an Add 'Em Up Game card and white boards. If you want to use the Game card more than once, either laminate or place in a sheet protector.
- 3. Working together the pair is to find the sum of each of the problems and then write the answer underneath the problem.
- 4. When all groups are finished, you will have them find the magic number by reading the clues provided and the pairs will cross out and eliminate answers until they have only one left, the Magic Number. There will be a different Magic Number for day 9 and day 10.

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What is a cube?	
How many sides does a cube have?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





1st Grade Add 'Em Up

21	32	31	10
<u>+ 18</u>	<u>+ 16</u>	<u>+ 24</u>	<u>+ 17</u>
17	25	62	22
<u>+ 21</u>	<u>+ 31</u>	<u>+ 13</u>	<u>+ 43</u>
81	54	19	42
<u>+ 14</u>	<u>+ 23</u>	<u>+ 40</u>	<u>+ 37</u>



Day # 9 Clues.

It is not 56. Cross it out. It is not 95. Cross it out. It is not 48. Cross it out. It is not 79. Cross it out. It is not 65. Cross it out. It is not 55. Cross it out. It is not 38. Cross it out. It is not 39. Cross it out. It is not 59. Cross it out. It is not 77. Cross it out. It is not 27. Cross it out.

What is the Magic Number? 75



*Activity \rightarrow Teachable

Moment(s) *throughout*

Component	Math
Grade Level:	First Grade
Lesson Title:	Add 'Em Up #2
Focus:	Addition

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition when there are two digits in the addends? Where do you start your adding? (right of the number moving left) What do you do with sum of the digits in the ones column? What do you add next? Where do you put that sum? How do you read the number?

Content (the "Meat")	
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Problem of the Day

Look around the classroom. Name three things that are circles.

	During the lesson check in
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1+2=3$ $2+1=3$ $3-2=1$ $3-1=2$ After they have written the problem in all 4 ways they will find a partner and say,	During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 6, 8, and 14.	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.





Have students write the entire Fact Family 6 + 8 = 14		
8 + 6 = 14		
14 – 6 = 8		
14 – 8 = 6		
Bring two students up to practice the conve	ersation.	
I ry it again with several other pairs of stud	ents.	
Remember that today they are only doing t	the Fact Family of 6, 8, and 14	
Math	Vocabulary	It is important to review
Word for today: plus	, coastary	academic math vocabulary
Description: Plus is a term we use in a a	ddition problem. It tells you to combine 2 or more	often throughout the day.
amounts to find a total. When you plus so	mething you add things together. Plus is a word	Complete the Vocabulary
that means adding something.		notebook for each word.
Review the entry for the word plus that is in	n vour Vocabularv notebook.	When possible, have
Vocabulary Notebook Sample:	,,,,,,,,,	students experience the word
		(Ex. 4 students creating a
New Word	My Description	right angle, multiple students
		Voosbulary Notobooko oon
plus	plus means to add together	be made from ¹ / ₂ of a
		composition book.
Personal Connection	Drawing	I
For my collection I have 3 stamps plus the 2 new ones I got today.	3 + 2 = 5	
	Activity	Focus on having young
A	Addition	people "compete" in pairs or
Addition		small groups. Once a game
Sometimes when we add we have number	is that have more than one digit. We can add 2	in the "When Homework Is
digit numbers, for example.	24	Complete" center.
	51 - 00	•
	+ 22	
	53	
Students will add the two digits in the ones	or units place, write the total underneath it, and	
the add the 2 digits that are in the tens place	ce and write the answer or sum underneath the	
Work through $8 - 10$ problems with the chi		
tens add up to more than 9. This is a less		
After working through the problems with th	e students and you are comfortable that they can	
move forward on their own, distribute the g		
A del (Euro I la		
Add 'EM Up Directions:		
1 Divide students into pairs		
2. Give each pair an Add <u>'Em Up Ga</u>	me card and white boards. If you want to use the	





3.	Game card more than once, either laminate or place in a sheet protector. Working together the pair is to find the sum of each of the problems and then write the answer underneath the problem.	
1.	When all groups are finished, you will have them find the magic number by reading the clues provided and the pairs will cross out and eliminate answers until they have only one left, the Magic Number. There is a different Magic Number for today.	

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What do you know about a calendar?	
What are the names of the month?	
What are the names of the days of the week?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Add 'Em Up

21	32	31	10
<u>+ 18</u>	<u>+ 16</u>	<u>+ 24</u>	<u>+ 17</u>
17	25	62	22
<u>+ 21</u>	<u>+ 31</u>	<u>+ 13</u>	<u>+ 43</u>
81	54	19	42
<u>+ 14</u>	<u>+ 23</u>	<u>+ 40</u>	<u>+ 37</u>



Day # 10 Clues

It is not 79. Cross it out. It is not 65. Cross it out. It is not 39. Cross it out. It is not 59. Cross it out. It is not 77. Cross it out. It is not 56. Cross it out. It is not 95. Cross it out. It is not 75. Cross it out. It is not 55. Cross it out. It is not 38. Cross it out. It is not 48. Cross it out.

What is the Magic Number? 27



Component	Math
Grade Level:	First Grade
Lesson Title:	Student Activity Choice
Focus:	Review

Materials:

White boards Crayolas Socks (use for erasers) Materials for games played the past 10 days

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Ask children what they know about addition and subtraction. Ask them to share what they do to write number sentences? Ask them about story problems and how they connect to number sentences?

Content (the "Meat")			
Problem of the Day Write a number sentence that has a sum of 8. Use picture, numbers, and words to show	*Activity → Teachable Moment(s) <i>throughout</i>		
Problem of the Day Write a number sentence that has a sum of 8. Use picture, numbers, and words to show your thinking. Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 7, 8, and 15.	 *Activity → Teachable Moment(s) throughout During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. 		
Have students write the entire Fact Family on the white board. 7 + 8 = 15			



 8 + 7 = 15 15 - 7 = 8 15 - 8 = 7 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 7, 8 and 15. 	
Activity Today is a review day. Students should select from the following list of activities: This Is The Sum What's The Difference? What's My Number? Decoder Clues Add 'Em Up	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

	Closing
	Review
Say:	
• Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
Which of the games did you enjoy playing the most?	
What about this game is fun for you?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	First Grade
Lesson Title:	Subtraction #1
Focus:	Subtraction

Materials:

White boards Crayolas Socks (for erasers) dice (3 for each pair)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtraction? What does it mean when we say minus or take away? When do you use subtraction? Write a number sentence that shows subtraction. Say the problem aloud to a partner.

Content (the "Meat")			
Problem of the Day You have 6 dogs. Each dog has 2 ears. How many ears do you have? Draw a picture to	*Activity → Teachable Moment(s) <i>throughout</i>		
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 9, 8 and 17. Have students write the entire Fact Family on the white board. 9 + 8 = 17	 During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. 		



8 + 9 = 17 17 - 9 = 8 17 - 9 = 8 Bring two students up to practice the converte Try it again with several other pairs of stud Then have children find a partner and prace Remember that today they are only doing the	ersation. ents. tice the conversation. Do this at least 4 times. the Fact Family of 8, 9 and 17.	
Math Vocabulary Word for Today: minus Description: The term means subtraction. It is represented by the symbol This symbol lets you know that there is a total and that you are going to remove part of that total. In subtraction the answer will tell you the difference between what you started with and what you end up with after you have taken something away. Vocabulary Notebook Sample:		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a
minus	New Word My Description right angle, mull acting out an ed when you take something away you minus it Vocabulary Not	
Personal Connection	Drawing	composition book.
It is easier to do a plus problem than a minus problem Students will complete this notebook for each vocabulary word that they are given.		
Activity Subtraction Subtraction is a math process that starts with a total and then takes a specified amount away from the total and then finds the difference. When items are subtracted it does not mean that the items are necessarily destroyed, but it does mean that they are in another place, or eaten (if you are talking about cookies), etc.		people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
the total by. The difference is the end results.		
Work with students on subtraction problems by writing them on the board and talking them through it. You are going to subtract from a two digit number. Be certain that there is NO regrouping. Explain to students that they begin subtracting in the ones column, the column furthest to the right, and then work their way across to the left.		
Subtraction Directions: 1. Divide students into pairs. 2. Give each pair a Subtraction Card, white boards and a Subtraction Game		



Board.

- 3. Together, students work the problems one at a time on the Subtraction Card.
- 4. Pair then locates the answer on the Subtraction Game Board and crosses it out.
- 5. Game is over when all numbers have been crossed out.

Closing Review Say: • Please recap what we did today. • Did we achieve our objectives?

Debrief
What did you like about what we did today in math?
What would you like to do more of the next time we do math?
What does it mean when we say we found an answer by addition?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Subtraction

68	78	49	89
<u>-41</u>	<u>-32</u>	<u>-27</u>	<u>-21</u>
29	58	59	29
<u>-12</u>	<u>-23</u>	<u>-14</u>	<u>-10</u>
39	68	79	67
<u>-24</u>	<u>-26</u>	<u>-20</u>	<u>-14</u>
77	29	29	38
- <u>33</u>	<u>-23</u>	<u>-14</u>	<u>-17</u>



1st Grade Game Board

27	46	22	67
17	35	45	19
15	42	59	53
44	6	15	21



Component	Math
Grade Level:	First Grade
Lesson Title:	Subtraction #2
Focus:	Subtraction

Materials:

White boards Crayolas Socks (for erasers) dice (3 for each pair)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about subtraction? What does it mean when we say minus or take away? When do you use subtraction? Write a number sentence that shows subtraction. Say the problem aloud to a partner.

Content (the "Meat")		
Problem of the Day	*Activity → Teachable	
John a 1 dime, 1 nickel and 3 pennies. He says he has 23¢. Is he right? How do you	Moment(s) <i>throughout</i>	
John a 1 dime, 1 nickel and 3 pennies. He says he has 23¢. Is he right? How do you know?	 Activity → Teachable	
Fact Practice	Moment(s) throughout During the lesson check in	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	with students repeatedly. Check in about what is	
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	happening and what they are	
They will write the problem in four ways.	thinking. Take advantage of any	
1 + 2 = 3	teachable moments. Stop the class and focus on a	
2 + 1 = 3	student's key learning or	
3 - 2 = 1	understanding. Ask open-	
3 - 1 = 2	ended questions to	
After they have written the problem in all 4 ways they will find a partner and say,	determine what the rest of	
"If $1 + 2 = 3$, then $2 + 1 = 3$ ".	the group is thinking. When possible, engage	
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".	students in a "teach to learn"	
You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	opportunity and have the	
Today you will introduce this activity and begin with the Fact Family of 3, 9, and 12.	student become the teacher.	
Have students write the entire Fact Family on the white board. 3 + 9 = 12		



0 0 40		
9 + 3 = 12 12 - 3 = 9		
12 – 9 = 3		
Bring two students up to practice the conv	ersation.	
Try it again with several other pairs of stud	lents.	
Then have children find a partner and prace	ctice the conversation. Do this at least 4 times.	
Remember that today they are only doing	the Fact Family of 3, 9, and 12.	
Math	Vocabulary	It is important to review
Word for Today: minus	-	academic math vocabulary
Description : The term means subtraction	It is represented by the symbol - This symbol	often throughout the day
lets you know that there is a total and that	vou are going to remove part of that total. In	Complete the Vocabulary
subtraction the answer will tell you the diff	erence between what you started with and what	notebook for each word.
you end up with after you have taken som	ething away	When possible have
Vocabulary Notebook Sample:		students experience the word
, , , , , , , , , , , , , , , , , , , ,		(Ex. 4 students creating a
New Word	My Description	right angle, multiple students
		acting out an equation).
minus	when you take something away you minus it	Vocabulary Notebooks can
		be made from $\frac{1}{2}$ of a
Personal Connection	Drawing	composition book.
	Diawing	
It is easier to do a plus problem than a		
minus problem		
minus problem		
	Activity	Focus on baying young
	Activity	Focus on having young
Subtraction	Activity	Focus on having young people "compete" in pairs or small groups. Once a game
Subtraction	Activity	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it
Subtraction Subtraction is a math process that starts v away from the total and then finds the diffe	Activity vith a total and then takes a specified amount erence. When items are subtracted it does not	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is
Subtraction Subtraction is a math process that starts v away from the total and then finds the diffe mean that the items are necessarily destro	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the diffe mean that the items are necessarily destro place, or eaten (if you are talking about co	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the diffe mean that the items are necessarily destro place, or eaten (if you are talking about co	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the diffe mean that the items are necessarily destro place, or eaten (if you are talking about co When you subtract it is important that stud	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stud the top as the subtrahend. The minuend t	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. lents understand that the largest number is on ells you the amount you are going to reduce	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stud the top as the subtrahend. The minuend to the total by. The difference is the end rest	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. lents understand that the largest number is on ells you the amount you are going to reduce ults.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stud the top as the subtrahend. The minuend to the total by. The difference is the end rest	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. lents understand that the largest number is on ells you the amount you are going to reduce ults.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stud the top as the subtrahend. The minuend to the total by. The difference is the end rest Work with students on subtraction problem	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. lents understand that the largest number is on ells you the amount you are going to reduce ults. Ins by writing them on the board and talking	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts w away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stud the top as the subtrahend. The minuend to the total by. The difference is the end rest Work with students on subtraction problem them through it. You are going to subtract	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. lents understand that the largest number is on ells you the amount you are going to reduce ults. Ins by writing them on the board and talking t from a two digit number. Be certain that to the the spin explored to reduce the spin explored to the table of the spin explored to th	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stud the top as the subtrahend. The minuend to the total by. The difference is the end rest Work with students on subtraction problem them through it. You are going to subtract there is NO regrouping. Explain to studen	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. lents understand that the largest number is on ells you the amount you are going to reduce ults. Ins by writing them on the board and talking t from a two digit number. Be certain that ts that they begin subtracting in the ones eld they work the inverse to the left.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stud the top as the subtrahend. The minuend to the total by. The difference is the end rest Work with students on subtraction problem them through it. You are going to subtract there is NO regrouping. Explain to studen column, the column furthest to the right, an	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. Hents understand that the largest number is on ells you the amount you are going to reduce ults. Ins by writing them on the board and talking t from a two digit number. Be certain that ts that they begin subtracting in the ones and then work their way across to the left.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
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Subtraction Subtraction is a math process that starts v away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stud the top as the subtrahend. The minuend to the total by. The difference is the end rest Work with students on subtraction problem them through it. You are going to subtract there is NO regrouping. Explain to studen column, the column furthest to the right, an Subtraction Directions:	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. Hents understand that the largest number is on ells you the amount you are going to reduce ults. Ins by writing them on the board and talking t from a two digit number. Be certain that ts that they begin subtracting in the ones and then work their way across to the left.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stuc the top as the subtrahend. The minuend to the total by. The difference is the end rest Work with students on subtraction problem them through it. You are going to subtract there is NO regrouping. Explain to studen column, the column furthest to the right, an Subtraction <u>Directions:</u> 1. Divide students into pairs.	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. Hents understand that the largest number is on ells you the amount you are going to reduce ults. Ins by writing them on the board and talking t from a two digit number. Be certain that ts that they begin subtracting in the ones and then work their way across to the left.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the differ mean that the items are necessarily destro- place, or eaten (if you are talking about co When you subtract it is important that stude the top as the subtrahend. The minuend to the total by. The difference is the end rest Work with students on subtraction problem them through it. You are going to subtract there is NO regrouping. Explain to studen column, the column furthest to the right, and Subtraction <u>Directions:</u> 1. Divide students into pairs. 2. Give each pair a Subtraction Card	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. lents understand that the largest number is on ells you the amount you are going to reduce ults. Ins by writing them on the board and talking t from a two digit number. Be certain that ts that they begin subtracting in the ones and then work their way across to the left.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the difference mean that the items are necessarily destroplace, or eaten (if you are talking about condition of the top as the subtract it is important that stude the top as the subtrahend. The minuend to the total by. The difference is the end rest Work with students on subtraction problem them through it. You are going to subtract there is NO regrouping. Explain to student column, the column furthest to the right, and subtraction problem. Subtraction Directions: 1. Divide students into pairs. 2. Give each pair a Subtraction Card Board.	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. Hents understand that the largest number is on ells you the amount you are going to reduce ults. Ins by writing them on the board and talking t from a two digit number. Be certain that ts that they begin subtracting in the ones and then work their way across to the left.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Subtraction Subtraction is a math process that starts v away from the total and then finds the difference mean that the items are necessarily destroplace, or eaten (if you are talking about condition of the top as the subtrahend. The minuend to the total by. The difference is the end restrict the total by. The difference is the end restrict there is NO regrouping. Explain to student column, the column furthest to the right, and subtraction problem. Subtraction Directions: 1. Divide students into pairs. 2. Give each pair a Subtraction Card Board. 3. Together, students work the problem	Activity with a total and then takes a specified amount erence. When items are subtracted it does not byed, but it does mean that they are in another okies), etc. Hents understand that the largest number is on ells you the amount you are going to reduce ults. Ins by writing them on the board and talking t from a two digit number. Be certain that ts that they begin subtracting in the ones and then work their way across to the left. I, white boards and a Subtraction Game ems one at a time on the Subtraction Card.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

5. Game is over when all numbers have been crossed out.

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do m	ath?
What is a number?	
What is a letter?	
Are they the same?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





1st Grade Subtraction

68	78	49	89
<u>-41</u>	<u>-32</u>	<u>-27</u>	<u>-21</u>
29	58	59	29
<u>-12</u>	<u>-23</u>	<u>-14</u>	<u>-10</u>
39	68	79	67
<u>-24</u>	<u>-26</u>	<u>-20</u>	<u>-14</u>
77	29	29	38
<u>-33</u>	<u>-23</u>	<u>-14</u>	<u>-17</u>



1st Grade Game Board

27	46	22	67
17	35	45	19
15	42	59	53
44	6	15	21



Component	Math
Grade Level:	First Grade
Lesson Title:	Ins and Outs #1
Focus:	Addition and Subtraction

Materials:

White boards Crayolas Activity at the end of the lesson plan

Socks

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

When you add and subtract, there can be rules that will help you have a pattern. For example, if you have the numbers 3, 4, and 5, and the rule for the pattern is to add 6, you would end up with 9, 10, and 11. If the rule for the pattern is to subtract 1, you would end up with 2, 3, and 4.

Content (the "Meat")		
Problem of the Day 4 + 4 = 8 is a doubles fact. Write 3 other doubles	*Activity → Teachable Moment(s) <i>throughout</i>	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments.	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$ 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



Today you will introduce this activity and be Have students write the entire Fact Family of 4 + 5 = 9 5 + 4 = 9 9 - 4 = 5 9 - 5 = 4 Bring two students up to practice the conver Try it again with several other pairs of student Then have children find a partner and practic Remember that today they are only doing the students that this fact is a double—the adde	gin with the Fact Family of 4, 5, and 9 n the white board. sation. nts. ce the conversation. Do this at least 4 times. e Fact Family of 4, 5, and 9. Share with nds are the same.	
Math Vocabulary Word for Today: minus Description: The term minus refers to the sign that indicates you need to subtract. It is a straight line. When you minus one number from another, you make the larger number less by the second number that you say after the word minus. We would read a math problem like this: 5 minus 3 equals 2. We would write it 5 – 3 = 2 Have children complete the Vocabulary notebook. Vocabulary Notebook Sample: New Word My Description minus Minus means to make less by a certain number Personal Connection I am 8 years old. My brother is 3. 8 – 3 = 5, and I am 5 years older. Students will complete this notebook for each vocabulary word that they are given		It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
Ad Ins and Outs Doing addition is like knowing that if you put will have an "out" that creates a pattern. For you apply the rule "add 10", then you will get would be to start with an "out", reverse the ru that to subtract 10) and you would have the Understanding this process helps students u reciprocal processes. Work several problems on the board with stu problems that they will be doing in the exerce	something "in" and you apply a rule to it, you example: if you put "in" the number 25 and t 35 "out". The reverse of this, subtraction, ule (if it says add 10 then you would reverse amount that was put in to begin with. Inderstand that addition and subtraction are udents. Set them up in the same format as the ise.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



In or Out #1 Directions:

- 1. Divide students into pairs.
- 2. Give each pair an In or Out Board, and white boards.
- 3. Working together, pair solves each of the In or Out Board problems.
- 4. When In or Out Board is complete, pair joins with another pair and shares answers.

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade In Or Out #1

Rule: +5		Rule: +10		Rule: -5	
In 10 25 50	Out	In 10 25 50	Out	In 10 25 50	Out
Rule: +5		Rule: +10		Rule: -5	
In 10 50	Out 25	In 30 46	Out 25	In 30 46	Out 25
Rule: -5		Rule: -10		Rule: +5	
In 16 48	Out 83	In 14 21	Out 58	In 54 42	Out 86
Rule: +6		Rule: +5		Rule: -3	
In 63	Out 30 12	In 84	Out 19 36	In 42	Out 29 60
Rule: +7		Rule: +4		Rule: -9	
In 10 25 50	Out	In 60 50	Out 72	In 90 16	Out 72



Component	Math
Grade Level:	First Grade
Lesson Title:	In and Out #2
Focus:	Addition and Subtraction

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Activity at the end of the lesson plan
Socks (for erasers)	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

When you add and subtract, there can be rules that will help you have a pattern. For example, if you have the numbers 3, 4, and 5, and the rule for the pattern is to add 6, you would end up with 9, 10, and 11. If the rule for the pattern is to subtract 1, you would end up with 2, 3, and 4. Do several examples of "ins and outs" on the board, inviting children to come to the board and complete the work.





3-1=2 After they have written the problem in all 4 "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, a You should have them practice this convers students every day. On the 5 th day, you wi the conversation will follow the pattern, but through his/her cards (of course we hope th correct response. Today you will introduce this activity and but Have students write the entire Fact Family 5 + 9 = 14 9 + 5 = 14 14 - 5 = 9 14 - 9 = 5		
Bring two students up to practice the conver- Try it again with several other pairs of stude Then have children find a partner and practice Remember that today they are only doing t		
Math Word for Today: difference Description: The term difference is the wo subtraction problem. When you subtract th This answer is the difference. Complete ar Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word	
New Word difference	My Description the answer when you subtract	(Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can
Personal Connection The difference between 9 and 6 is three. Students will complete this notebook for ea	Drawing 9.6.3 ch vocabulary word that they are given.	be made from ½ of a composition book.
Ins and Outs Doing addition is like knowing that if you pu will have an "out" that creates a pattern. For you apply the rule "add 10", then you will ge would be to start with an "out", reverse the that to subtract 10) and you would have the Understanding this process helps students reciprocal processes.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	



Work several problems on the board with students. Set them up in the same format as the problems that they will be doing in the exercise.	
 In or Out #2 <u>Directions:</u> 1. Divide students into pairs. 2. Give each pair an In or Out Board, and white boards. 3. Working together, pair solves each of the In or Out Board problems. 4. When In or Out Board is complete, pair joins with another pair and shares answers. 	

Closing
Review
Say:
Please recap what we did today.
Did we achieve our objectives?
Debrief
What did you like about what we did today in math?
How can you use the information from today in school tomorrow?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade In Or Out #2

Rule: +5		Rule: +10		Rule: -5	
In 10 25 50	Out	In 10 25 50	Out	In 10 25 50	Out
Rule: +5		Rule: +10		Rule: -5	
In 10 50	Out 25	In 30 46	Out 25	In 30 46	Out 25
Rule: -5		Rule: -10		Rule: +5	
In 16 48	Out 83	In 14 21	Out 58	In 54 42	Out 86
Rule: +6	Rule: +6 Rule: +5			Rule: -3	
In 63	Out 30 12	In 84	Out 19 36	In 42	Out 29 60
Rule: +7		Rule: +4		Rule: -9	
In 10 25 50	Out	In 60 50	Out 72	In 90 16	Out 72



Component	Math
Grade Level:	First Grade
Lesson Title:	Ins and Outs #3
Focus:	Addition and Subtraction

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

When you add and subtract, there can be rules that will help you have a pattern. For example, if you have the numbers 13, 15, and 17, and the rule is plus 5, you will end up with 18, 20 and 22. What would the answers be if you had the same rule and you started with number 19, 21, and 23. If the rule for the pattern is to subtract 8, and you began with 13, 15, and 17, what would you end up with? Do several other examples of "ins and outs" on the board, inviting children to come to the board and complete the work.

Content (the "Meat")				
Problem of the Day There are two bags with marbles in them. Each bag has 6 marbles. How many marbles are there all together? Draw your answer	*Activity → Teachable Moment(s) <i>throughout</i>			
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.	burning the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments.			
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$ 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.			



through his/her cards (of course we hope t		
Today you will introduce this activity and b	egin with the Fact Family of 6, 9 and 15.	
Have students write the entire Fact Family	on the white board.	
6 + 9 = 15		
9 + 6 = 15		
15 - 6 = 9		
10 - 9 = 0	oregation	
Try it again with several other pairs of stud	ents	
Then have children find a partner and prac	tice the conversation. Do this at least 4 times.	
Remember that today they are only doing t	the Fact Family of 6, 9 and 15.	
Math	Vocabulary	It is important to review
Word for today: subtraction		academic math vocabulary
Description: The term subtraction refers	to an operation in math where you start with a	often throughout the day.
total and then take some of it away an	d then you find out how much you have left.	Complete the Vocabulary
Subtraction is the opposite of addition.		notebook for each word.
Have children complete the vocabulary not	tebook for the word context.	When possible, have
Vocabulary Notebook Sample:		students experience the word
New Word	My Description	(Ex. 4 students creating a
		right angle, multiple students
subtraction	taking something away from a total	Acting out an equation).
		bo made from 1/ of a
Personal Connection	Drawing	composition book
Llike to de subtraction problems		
Tike to do subtraction problems.	cubtract	
	JUNIALI	
	Activity	Focus on having young
Ins and Outs		people "compete" in pairs or
Doing addition is like knowing that if you pu	ut something "in" and you apply a rule to it, you	small groups. Once a game
will have an "out" that creates a pattern. F	or example: if you put "in" the number 25 and	is mastered you can utilize it
you apply the rule "add 10", then you will g	et 35 "out". The reverse of this, subtraction,	in the "When Homework Is
would be to start with an "out", reverse the	rule (if it says add 10 then you would reverse	Complete" center.
that to subtract 10) and you would have the	e amount that was put in to begin with.	
Inderstanding this process helps students	understand that addition and subtraction are	
reciprocal processes.		
Work several problems on the board with s		
problems they will be doing in the exercise		
he are O -14 #0		
In or Out #3 Directions		
1 Divide students into pairs		
2. Give each pair an In or Out Roard		
3. Working together, pair solves each		
4. When In or Out Board is complete		



	Closing		
	Review		
Say:			
Please recap what we did today.			
 Did we achieve our objectives? 			
	Debrief		
What did you like about what we did today in math?			
What would you like to do more of next time?			
What are the different shapes that you made with the marshmallows and toothpicks			
Where can you find those shapes in the world?			

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





1st Grade In Or Out #3

Rule: +5		Rule: +10		Rule: -5	
In 40	Out	In 25	Out	In 18	Out
32		42		27	
61		36		71	
Rule: +5		Rule: +10		Rule: -5	
In	Out	In	Out	In	Out
23		22		16	
	90		54		48
46		78		51	
Rule: -5		Rule: -10		Rule: +5	
In	Out	In	Out	In	Out
11		43		66	
	78		78		49
69		32		50	
Rule: +6		Rule: +5		Rule: -3	
In	Out	In	Out	In	Out
71			29	67	
	44		44		14
	18	71			59
Rule: +7	ule: +7 Rule: +4		Rule: -9		
In	Out	In	Out	In	Out
34		45		78	
	71		66		46
52		58		29	


Component	Math
Grade Level:	First Grade
Lesson Title:	Ins and Outs #4
Focus:	Addition and Subtraction

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

When you add and subtract, there can be rules that will help you have a pattern. For example, if you have the numbers 13, 15, and 17, and the rule is plus 10, you will end up with 23, 25, and 27. What would the answers be if you had the same rule and you started with number 19, 21, and 23. If the rule for the pattern is to subtract 2, and you began with 11, 13, 15, and 17, what would you end up with? Do several other examples of "ins and outs" on the board, inviting children to come to the board and complete the work.

Problem of the Day*Activity \rightarrow Teachable Moment(s) throughoutLook at the table below. The table shows how many cookies Martin ate each day. How many cookies do you think Martin will eat on Friday if he follows the pattern of the other days?The table below. The table shows how many cookies Martin ate each day. How many cookies do you think Martin will eat on Friday if he follows the pattern of the other days?During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking.DayMTWThF#2345Take advantage of any teachable moments.Fact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.1 + 2 = 3 2 + 1 = 3 3 - 2 = 12 + 1 = 3 3 - 2 = 13 - 2 = 1 0 - 13 - 2 = 1 0 - 14 - 04 - 0		Content (the "Meat")						
Look at the table below. The table shows how many cookies Martin ate each day. How many cookies do you think Martin will eat on Friday if he follows the pattern of the other days?		Problem of the Day *Activity → Teachable Moment(s) <i>throughout</i>						
days?Check in about what is happening and what they are thinking. \boxed{Day} MTWThF $\#$ 2345Take advantage of any teachable moments.Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to 	Look at many co	Look at the table below. The table shows how many cookies Martin ate each day. How nany cookies do you think Martin will eat on Friday if he follows the pattern of the other with students repeatedly.						
DayMTWThF $\#$ 2345Take advantage of any teachable moments.Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)Take advantage of any teachable moments.The ywill write the problem in four ways.1 + 2 = 3 $2 + 1 = 3$ $3 - 2 = 1$ When possible, engage students in a "teach to learn" opportunity and have the	days?							Check in about what is happening and what they are thinking
#2345Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. $1+2=3$ $2+1=3$ $3-2=1$ When possible, engage students in a "teach to learn" opportunity and have the	Day	М	Т	W	Th	F		Take advantage of any
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. $1+2=3$ $2+1=3$ $3-2=1$ When possible, engage students in a "teach to learn" opportunity and have the	#	2	teachable moments					
	Fact Pra and sub another Children They wil 1 2 3	Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the				Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the		



"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 7, 9 and 16. Have students write the entire Fact Family on the white board. 7 + 9 = 16 9 + 7 = 16 16 - 7 = 9 16 - 9 = 7 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 7, 9, and 16.				
Math	Vocabulary	It is important to review academic math vocabulary		
Description: The term number sentence demonstrates the math for the story we rea = 5 is a number sentence. The story is this friend. How many cookies does Judy have Judy has 9 flowers. She gave 4 to her gra left? Review the entry in your Vocabulary Notes anything that you think is important.	often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a			
New Word	My Description	composition book.		
number sentence	Number sentences tell you how numbers are related			
Personal Connection	Drawing			
I had 8 pieces of candy. I game my sister 2 pieces. Now I have 6 pieces left.	8 - 2 = 6			
	Focus on having young			
Ins and Outs Doing addition is like knowing that if you pu will have an "out" that creates a pattern. F	ut something "in" and you apply a rule to it, you or example: if you put "in" the number 25 and	small groups. Once a game is mastered you can utilize it in the "When Homework Is		



you apply the rule "add 10", then you will get 35 "out". The reverse of this, subtraction, would be to start with an "out", reverse the rule (if it says add 10 then you would reverse that to subtract 10) and you would have the amount that was put in to begin with.	Complete" center.			
Understanding this process helps students understand that addition and subtraction are reciprocal processes.				
Work several problems on the board with students. Set them up in the same format as the problems they will be doing in the exercise.				
 In or Out #4 <u>Directions:</u> Divide students into pairs. Give each pair an In or Out Board, and white boards. Working together, pair solves each of the In or Out Board problems. When In or Out Board is complete, pair joins with another pair and shares answers. 				

Closing	
Closing	
Review	
Say:	
 Please recap what we did today. 	
Did we achieve our objectives?	
Debrief	
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
What are the different shapes that you made with the marshmallows and toothpicks	
Where can you find those shapes in the world?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade In Or Out #4

Rule: +6		Rule: +2		Rule: -7	
In	Out	In	Out	In	Out
10		10		10	
25		25		25	
50		50		50	
Rule: +10		Rule: +3		Rule: -8	
In	Out	In	Out	In	Out
10		30		30	
	25		25		25
50		46		46	
Rule: -7		Rule: -6		Rule: +2	
In	Out	In	Out	In	Out
16		14		54	
	83		58		86
48		21		42	
Rule: +4		Rule: +1		Rule: -8	
In	Out	In	Out	In	Out
63			19	42	
	30		36		29
	12	84			60
Rule: +3		Rule: +7		Rule: -10	
In	Out	In	Out	In	Out
10		60		90	
25			72		72
50		50		16	



Component	Math
Grade Level:	First Grade
Lesson Title:	Puzzles #1
Focus:	Addition and Subtraction

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about telling time? What is an analog clock? How many numbers are on the clock face? Name 5 different shapes. On your white board, draw those shapes. What number comes before 13? What number comes after?

Content (the "Meat")	
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>
Mr. Smith has 9 boys and 7 girls in his class. He has 16 soccer balls. Does Mr. Smith have enough soccer balls to have one for each student?	During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Check in about what is happening and what they are thinking. Take advantage of any toachable moments
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
correct response. Today you will introduce this activity and begin with the Fact Family of 8, 9 and 17. Have students write the entire Fact Family on the white board.	



8 + 9 = 17 9 + 8 = 17 17 - 8 = 9 17 - 9 = 8 Bring two students up to practice the conversati Try it again with several other pairs of students. Then have children find a partner and practice t Remember that today they are only doing the Fa					
Math Voca Word for Today: minuend Description: The term minuend is used to desc you are subtracting from. In a number sentence problem. In the problem, $6 - 2 = 4$, the 6 is the Have children revisit the entry in the Vocabulary Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex.4 students creating a				
New Word	My Description	right angle, multiple students			
minuend	the number you subtract from	Vocabulary Notebooks can be made from ½ of a			
Personal Connection	Drawing	composition book.			
In the number sentence 9 – 3 = 6, 9 is the minuend.	- 3 = 6				
Activity Puzzles, Puzzles, Puzzles Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in they are developing. Review each of the Puzzles with the students (changing the numbers so they are not just redoing when they work in their pairs). Each puzzle sheet will have 5 parts. There will be something with addition, telling time, numbers in and out/ or before/after, geometry, and counting. Puzzles #1 Directions: 1. Divide students into pairs. 2. Give each pair a Puzzle sheet inside a sheet protector or laminated.					
 Pair works together to solve the puzzles. When puzzles are finished, pair finds another pair to share work with. Activity is over when all puzzles have been solved. 					



Clo	osing
Re	eview
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
De	brief
What did you like about today's lesson?	
How can you use the information from today during class ton	norrow?
What is one key learning you had today in math?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Puzzles #1

Write a numb	per in the spa	ce closest to Then add.	Draw hands or	n the clo	ck to	show 1:30.
	+		11 10 9 8 7	12	1	2 3 4
Fill in the nur	Fill in the numbers:			e:		
Before	Number	After	square			
	53					
	107		triangle			
	38					
	19		circle			
	1	<u> </u>				
Count by one	es. Write in th	ne missing nur	nbers.			
34, 35, 36, 37	7,,	,, 41	, 42, 43,,	,,		_, 47, 48,
49, 50,	;;					



Component	Math
Grade Level:	First Grade
Lesson Title:	Puzzles #2
Focus:	Addition and Subtraction

Materials:

White boards Crayolas

Socks

Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about telling time? What is an analog clock? How many numbers are on the clock face? Name 5 different shapes. On your white board, draw those shapes. What number comes before 29? What number comes after?

Content (the "Meat")					
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>				
Here is one way to show 9. Write at least 2 other ways to show 9. $3 + 3 + 3 = 9$	During the lesson check in with students repeatedly.				
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 7. 7, and 14	Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.				



Have students write the entire Fact Family o 7 + 7 = 14 7 + 7 = 14 14 - 7 = 7 Bring two students up to practice the conver Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing th give you examples of doubles. Ask students families.		
Math V Word for Today: difference Description: The term difference is the wor subtraction problem. The word is difference of subtraction. You start with a total, take so difference. Look at this problem: 7-5 = 2. Review the entry in your Vocabulary Noteboo friend. Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students	
New Word difference	My Description In subtraction the amount you have left when you subtract	acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection The difference of 12 – 4 is 8. In other words, 12 is 4 more than 8 or 8 more than 4.	Drawing	
Ac Puzzles, Puzzles, Puzzles Puzzles can give students an opportunity to several days, pairs of students will have the they are developing. Review each of the Puzzles with the student redoing when they work in their pairs). Each something with addition, telling time, number counting. Puzzles #2 <u>Directions:</u> 1. Divide students into pairs. 2. Give each pair a Puzzle sheet inside 3. Pair works together to solve the puz	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	

5. Activity is over when all puzzles have been solved.

Clos	sing
Rev	iew
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
Deb	rief
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
Give an example of how you will use what we did today in sch	ool tomorrow.

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.







1st Grade Puzzles #2

Write a number in the space closest to		Draw hands on the clock to show 3:00.					
the center.		en auu.			12	92	
				11	14	1	2
			10				2
	+		9				3
			в				4
		,		7	6	5	
Fill in the numbers	:		Draw the sha	ape:			
In	Out]	rectangle				
8	13		Ū.				
2		-	star				
14							
	25	-	heart				
		J					
Count backward b	y ones. Write	e in the m	nissing numbe	ers.			
	•		C				
100, 100, 10 4 ,	,,		, 143, 140	',			
147,,	_3						
147,,	_,						



Component	Math
Grade Level:	First Grade
Lesson Title:	Puzzles #3
Focus:	Addition and Subtraction

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Focus Student's Prior Knowledge

What do you know about telling time? What is an analog clock? Draw one and show the time 3:00. How many numbers are on the clock face? Name 5 different shapes. On your white board, draw those shapes. What number comes before 41? What number comes after?

Content (the "Meat")					
Problem of the Day There are 4 nests and each nest has 2 eggs. How many eggs are there all together? Draw	*Activity → Teachable Moment(s) <i>throughout</i>				
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1 + 2 = 3$ $2 + 1 = 3$ $3 - 2 = 1$ $3 - 1 = 2$ After they have written the problem in all 4 ways they will find a partner and say,"If $1 + 2 = 3$, then $2 + 1 = 3$ ".The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".You should have them practice this conversation (exactly as it is written) with 3-5 otherstudents every day. On the 5th day, you will utilize all 4 problems from the days before, andthe conversation will follow the pattern, but the second responder will need to quickly lookthrough his/her cards (of course we hope they remember without looking) and gives thecorrect response.Today you will introduce this activity and begin with the Fact Family of 8, 8 and 16.Have students write the entire Fact Family on the white hoard	During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.				



8 + 8 = 16 8 + 8 = 16 16 - 8 = 8 16 - 8 = 8 Bring two students up to practice the converse Try it again with several other pairs of studen Then have children find a partner and practice Remember that today they are only doing the		
Math Vo Word for Today: addend Description: The term addend is a word that	t we use to describe the numbers that we add	It is important to review academic math vocabulary often throughout the day.
together in an addition problem. In the proble are the addends in these two problems: 3 +	2 = 5 or 6 + 3 = 9	notebook for each word.
Have children review the Vocabulary noteboo	bk for the word addend.	When possible, have
, ,		students experience the word
Vocabulary Notebook Sample:		(EX. 4 students creating a right angle, multiple students
New Word	My Description	acting out an equation).
addend	The two or more numbers that you add together are the addends	Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection	Drawing	
In the number sentence 6 + 4 = 10, the 6 and the 4 are addends. That is how old I am.	6+4	
Ac Puzzles, Puzzles, Puzzles Puzzles can give students an opportunity to p several days, pairs of students will have the o they are developing. Review each of the Puzzles with the students redoing when they work in their pairs). Each something with addition, telling time, numbers counting.	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	
 Puzzles #3 <u>Directions:</u> Divide students into pairs. Give each pair a Puzzle sheet inside Pair works together to solve the puzz When puzzles are finished, pair finds Activity is over when all puzzles have 		



	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What is a cube?	
How many sides does a cube have?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.





1st Grade Puzzles #3

Write a number in the space closest to		Draw hands on the clock to show 2:30.					
the center.				10			
		\land		11	12	1	
			10				2
	+		9				3
			8				4
				7	6	5	
Fill in the nur	nbers:		Draw this co	oin ai	nd tell i	its va	lue:
Before	Number	After	penny				
	106						
	125		dime				
	87						
	90		nickel				
Count by five	s. Write in th	e missing nur	nbers.				
25, 30,	11	, 50, 55,			_, 75,	80	,
,	_						



Component	Math
Grade Level:	First Grade
Lesson Title:	Puzzles #4
Focus:	Addition and Subtraction

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about telling time? Draw a digital clock and show the time 5:30. How many numbers are on the clock face? Name 5 different shapes. On your white board, draw those shapes. What number comes before 86? What number comes after?

Content (the "Meat")					
Problem of the Day If $3 + \cancel{2} = 9$, what is the value of the $\cancel{2}$? How do you know you are correct?	*Activity → Teachable Moment(s) <i>throughout</i>				
If $3 + 37 = 9$, what is the value of the 37 ? How do you know you are correct? Fact Practice Fact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 9, 9, and 18.	Moment(s) throughout During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.				
Have students write the entire Fact Family on the white board. 9 + 9 = 18					



9 + 9 = 18 18 - 9 = 9 18 - 9 = 9 Bring two students up to practice the converting two students up to practice the converting the transmission of tra	ersation. ents. tice the conversation. Do this at least 4 times. he Fact Family of 9. 9.and 18.	
Math Word for today: plus Description: Plus is a term we use in a ac amounts to find a total. When you plus son that means adding something.	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.	
Review the entry for the word plus that is in Vocabulary Notebook Sample: New Word	students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).	
plus Personal Connection For my collection I have 3 stamps plus the 2 new ones I got today.	plus means to add together Drawing 3 + 2 = 5	Vocabulary Notebooks can be made from ½ of a composition book.
Puzzles, Puzzles	Focus on having young people "compete" in pairs or small groups. Once a game	
Puzzles can give students an opportunity to several days, pairs of students will have the they are developing. Review each of the Puzzles with the studen redoing when they work in their pairs). Eac something with addition, telling time, number counting.	is mastered you can utilize it in the "When Homework Is Complete" center.	
 Puzzles #4 <u>Directions:</u> Divide students into pairs. Give each pair a Puzzle sheet insid Pair works together to solve the pu When puzzles are finished, pair find Activity is over when all puzzles had 		



	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What do you know about a calendar?	
What are the names of the month?	
What are the names of the days of the week?	

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.





1st Grade Puzzles #4

Write a numb	per in the space	ce closest to	Draw h	ands or	n the clo	ck to	show 4:30.
the center.		I ne add.			10		
				11	12	1	
				10			2
	+		į	9			3
		\searrow		в			4
				7	6	5	
Fill in the nur	nbers:		Draw th	ne coins	to show	v the a	amount:
Before	Number	After	13¢				
	53						
	107		28¢				
	38						
	19		61¢				
Count backw	ard by 5s. W	rite in the mis	sing nun	nbers.			
95, 90,		, 70, 65, 60),,	·,	,	40,	
	_1						



Component	Math
Grade Level:	First Grade
Lesson Title:	Student Activity Choice
Focus:	Review

Materials:

White boards Crayolas Socks (use for erasers) Materials for games played the past 10 days

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Ask children what they know about addition and subtraction. Ask them to share what they do to write number sentences? Ask them about story problems and how they connect to number sentences?

Content (the "Meat")	
Problem of the Day List 6 things in your classroom that are longer than your shoe.	*Activity → Teachable Moment(s) <i>throughout</i>
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	During the lesson check in with students repeatedly.
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Check in about what is happening and what they are thinking.
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 2	Take advantage of any teachable moments.
2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If 1 + 2 = 3, then 2 + 1 =3". The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 10, 10, and 20 Have students write the entire Fact Family on the white board. 10 + 10 = 20 10 + 10 = 20	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



20 - 10 = 10 20 - 10 = 10	
Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 10, 10, and 20.	
Activity Today is a review day. Students should select from the following list of activities: Subtraction In or Out #1 In or Out #2 In or Out #3 Puzzles #1 Puzzles #2 Puzzles #3 Puzzles #4	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
Which of the games did you enjoy playing the most?	
What about this game is fun for you?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	First Grade
Lesson Title:	Greater Than, Less Than #1
Focus:	Comparison

Materials:

White boards Crayolas Socks (for erasers) dice (3 for each pair)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about comparing numbers? What are some of the symbols we use to make comparisons? (<, >, =) Why is it important that you know how to compare numbers? When might you use this skill? How would you compare these numbers: 14 and 21; 71 and 43?

Content (the "Meat")		
Problem of the Day Look at the rows of Xs below. Divide them into groups of 5.	*Activity → Teachable Moment(s) <i>throughout</i>	
X X X X X X X X X X X X X X X X X X X X	During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking.	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1	Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	





through his/her cards (of course we hope they correct response. Today you will introduce this activity and begin Have students write the entire Fact Family on 3 + 6 = 9 6 + 3 = 9 9 - 3 = 6 9 - 6 = 3 Bring two students up to practice the conversa Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the	remember without looking) and gives the n with the Fact Family of 3, 6, and 9. the white board. ation. s. e the conversation. Do this at least 4 times. Fact Family of 3, 6, and 9.	
Math Vo	cabulary	It is important to review
Word for Today: compare Description: The term compare means to look at two or more numbers and determine if they are equal, larger, or smaller. Compare is an action that identifies the relationship between numbers. We use symbols to make these comparisons: < less than, >greater than, and = equal. Create an entry for the term "compare" in your Vocabulary Notebook. Share with a peer.		academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a
New Word	My Description	right angle, multiple students
compare	say how numbers are related	Vocabulary Notebooks can be made from ½ of a
Personal Connection	Drawing	
7 > 3.	greater than	
Students will complete this notebook for each	vocabulary word that they are given.	
Activity Greater Than or Less Than It is important for children to be able to compare numbers, knowing which one is larger, which is smaller, and when numbers are equal.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is
There are symbols to represent greater than > and less than <. Sometimes this symbol is called the alligator, and people can identify the largest number because the mouth is open to the largest number.		Complete" center.
When reading the comparison you begin with the number on the left and tell whether it is greater than or less than the second number.		
Practice several comparisons on the board with the children. Be sure to talk through what you are thinking so that they can hear how you are thinking about the problem. Be sure that you read the comparison aloud after you have made it.		



Greater Than or Less Than

Directions:

- 1. Deal each player 5 of the number cards.
- 2. Place the remainder of the cards face down on the board.
- 3. Place the < > cards face down next to the cards.
- 4. Turn up the first card. This is the "comparison number"
- 5. Player draws a < or > card and must play a number from his/her hand that is < or > the beginning number. If player can play a number, the next player repeats the steps, but the number the first player played is now the "comparison number". If the player can not play, then he/she must draw a card.
- 6. First player to play all of his/her cards, wins.

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math? What would you like to do more of the next time we do math? What does it mean when we say we found an answer by addition?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Greater Than or Less Than (It is suggested that you run the numbers on one color and the < and > symbols on another color to make separation easier.

1	2	3
4	5	6
7	8	9





10	11	12
13	14	15
16	17	18









Component	Math
Grade Level:	First Grade
Lesson Title:	Greater Than, Less Than #2
Focus:	Number

Materials:

White boards Crayolas Socks (for erasers) dice (3 for each pair)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about comparing numbers? What are some of the symbols we use to make comparisons? (<, >, =) Why is it important that you know how to compare numbers? When might you use this skill? How would you compare these numbers: 34 and 21; 82 and 93?

Content (the "Meat")			
Problem of the Day John has 13 Hot Wheels. Mark has 17 How Wheels. How many Hot Wheels do they have in all? Explain how you got your answer.	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in		
in all? Explain how you got your answer.Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1+2=3$ $2+1=3$ $3-2=1$ $3-1=2$ After they have written the problem in all 4 ways they will find a partner and say,	During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of		
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 4, 6, and 10. Have students write the entire Fact Family on the white board.	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.		



4 + 6 = 10 6 + 4 = 10 10 - 4 = 6 10 - 6 = 4 Bring two students up to practice the conversa Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the		
Math Vocabulary Word for Today: compare Description: The term compare means to look at two or more numbers and determine if they are equal, larger, or smaller. Compare is an action that identifies the relationship between numbers. We use symbols to make these comparisons: < less than, >greater than, and = equal. Create an entry for the term "compare" in your Vocabulary Notebook. Share with a peer. Vocabulary Notebook Sample:		It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students
compare	say how numbers are related	acting out an equation). Vocabulary Notebooks can be made from ½ of a
Personal Connection 7 > 3.	Drawing greater than	composition book.
Activity Greater Than or Less Than It is important for children to be able to compare numbers, knowing which one is larger, which is smaller, and when numbers are equal. There are symbols to represent greater than > and less than <. Sometimes this symbol is called the alligator, and people can identify the largest number because the mouth is open to the largest number.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
When reading the comparison you begin with the number on the left and tell whether it is greater than or less than the second number.		
Practice several comparisons on the board with the children. Be sure to talk through what you are thinking so that they can hear how you are thinking about the problem. Be sure that you read the comparison aloud after you have made it.		
Greater Than or Less Than Directions: 1. Deal each player 5 of the number car 2. Place the remainder of the cards face 3. Place the < > cards face down next to	ds. e down on the board. o the cards.	



4.	Turn up the first card. This is the "comparison number"
5.	Player draws a < or > card and must play a number from his/her hand that is < or >
	the beginning number. If player can play a number, the next player repeats the
	steps, but the number the first player played is now the "comparison number". If
	the player can not play, then he/she must draw a card.
6.	First player to play all of his/her cards, wins.

Closing			
Review			
Say:			
Please recap what we did today.			
 Did we achieve our objectives? 			
Debrief			
What did you like about what we did today in math?			
What would you like to do more of the next time we do math?			
What is a number?			
What is a letter?			
Are they the same?			
Are they the same?			

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Greater Than or Less Than (It is suggested that you run the numbers on one color and the < and > symbols on another color to make separation easier.

1	2	3
4	5	6
7	8	9



Г

10	11	12
13	14	15
16	17	18





<	<	<
UP ↑	UP ↑	UP ↑
<	<	<
UP ↑	UP ↑	UP ↑
>	>	>
UP ↑	UP ↑	UP ↑
>	>	>
UP ↑	UP ↑	UP ↑



*Activity \rightarrow Teachable

Moment(s) *throughout* During the lesson check in

Component	Math
Grade Level:	First Grade
Lesson Title:	Adding and Subtracting #1
Focus:	Addition and Subtraction

Materials:

White boards Cravolas

Socks

Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction? What are the words we use to describe the answers in an addition problem? What are the words we use to describe the answers in a subtraction problem? Write several addition and subtraction problems on the board. Ask children to come to the board and solve the problems.

Content (the "Meat")	
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Problem of the Day

Look at the number sentence below. Is it correct? How do you know?

$5 \pm 0 = 12$

5 + 9 = 13	with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Check in about what is happening and what they are thinking. Take advantage of any teachable moments.
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



correct response.		
Today you will introduce this activity and be Have students write the entire Fact Family of 5+6=11 6+5=11 11-5=6 11-6=5 Bring two students up to practice the conver Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the students that this fact is a double—the adde		
Math Vocabulary Word for Today: minus Description: The term minus refers to the sign that indicates you need to subtract. It is a straight line. When you minus one number from another, you make the larger number less by the second number that you say after the word minus. We would read a math problem like this: 5 minus 3 equals 2. We would write it 5 – 3 = 2 Have children complete the Vocabulary notebook. Vocabulary Notebook Sample: New Word My Description minus Minus means to make less by a certain number Personal Connection Drawing 1 am 8 years old. My brother is 3. 8 – 3 = 5, and 1 am 5 years older. Drawing Students will complete this notebook for each vocabulary word that they are given.		It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation) Vocabulary Notebooks can be made from ½ of a composition book
Addition and Subtraction Addition and Subtraction are reciprocal oper of combining to groups and finding the sum. begins with a total, removes a part of the tota Write several addition and subtraction proble the children. Be sure to talk about what you terms to use as they solve the problems. Addition or Subtraction <u>Directions:</u>	ctivity ations. Addition is the mathematical operation Subtraction is the mathematical operation that al, and determines the difference. ems on the board and work them through with are thinking and share with them the correct	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.




- 1. Divide students into pairs.
- 2. Give each pair a deck of Addition or Subtraction cards and a game board.
- 3. Working together, pair draws a card and either adds or subtracts, and then finds the answer on the game board.
- 4. Activity is complete when all of the answers are covered.

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math? What would you like to do more of the next time we do math? What is a cylinder? Where can you see them in the world?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.

Adding and Subtracting Cards

14	7	9
<u>- 8</u>	<u>+ 4</u>	<u>+ 6</u>
9	13	4
<u>- 2</u>	<u>- 8</u>	<u>+ 4</u>
6	17	3
<u>+ 3</u>	<u>- 8</u>	<u>+ 7</u>
11	9	10
<u>- 9</u>	<u>+ 7</u>	<u>- 7</u>

Adding and Subtracting Game Board

3	11	15
9	10	16
9	6	7
2	8	5

Component	Math
Grade Level:	First Grade
Lesson Title:	Adding and Subtracting #2
Focus:	Addition and Subtraction

Materials:	
White boards	decks of cards with face cards and jokers removed
Crayolas	Activity at the end of the lesson plan
Socks (for erasers)	

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction? What are the words we use to describe the answers in an addition problem? What are the words we use to describe the answers in a subtraction problem? Write several addition and subtraction problems on the board. Ask children to come to the board and solve the problems.

Content (the "Meat")					
Problem of the Day Look at these solid figures. Name at least 3 ways that they are alike.	*Activity → Teachable Moment(s) <i>throughout</i>				
	During the lesson check in with students repeatedly.				
Fact Practice Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	Check in about what is happening and what they are thinking.				
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.				
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of				
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	the group is thinking. When possible, engage				
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	students in a "teach to learn" opportunity and have the student become the teacher.				





correct response.		
Today you will introduce this activity and b		
Have students write the entire Fact Family		
6 + 7 = 13		
7 + 6 = 13		
13 - 6 = 7		
13 - 7 = 6		
Bring two students up to practice the conve	ersation.	
I ry it again with several other pairs of stude	ents.	
Then have children lind a partner and prac	he East Eamily of 6, 7, and 12	
Remember that today they are only doing t	në Fact Faniny 010, 7, and 15.	11. · · · · ·
Math	Vocabulary	It is important to review academic math vocabulary
Word for Ioday: difference		
Description : The term difference is the wo	ord we use to talk about the answer in an	Complete the Veesbulen
subtraction problem. When you subtract th	ne numbers 9 - 6 you will have a difference of 3.	Complete the vocabulary
This answer is the difference. Complete ar	n entry for sum in your Vocabulary Notebook.	
		When possible, have
Vocabulary Notebook Sample:		Students experience the word
New Word	My Description	right angle multiple students
		acting out an equation)
difference	the answer when you subtract	Vocabulary Notebooks can
Deve and Commontion	Drawing	be made from $\frac{1}{2}$ of a
Personal Connection	Drawing	composition book.
The difference between 0 and 6 is		
three difference between 9 and 6 is		
unee.		
Students will complete this notebook for ea	ch vocabulary word that they are given.	
A	Activity	Focus on having young
Addition and Subtraction		people "compete" in pairs or
Addition and Subtraction are reciprocal ope	erations. Addition is the mathematical operation	small groups. Once a game
of combining to groups and finding the surr	n. Subtraction is the mathematical operation that	is mastered you can utilize it
begins with a total, removes a part of the to	otal, and determines the difference.	in the "When Homework Is
		Complete" center.
write several addition and subtraction prop	ers on the board and work them the correct	
the children. Be sure to talk about what yo		
terms to use as they solve the problems.		
Addition or Subtraction		
Directions:		
1. Divide students into pairs.		
2. Give each pair a deck of Addition of		
3. Working together, pair draws a car		
the answer on the game board.		
4. Activity is complete when all of the	answers are covered.	



	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
How can you use the information from today in school to	morrow?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.

Adding and Subtracting Cards

15	9	6
<u>- 8</u>	<u>+ 4</u>	<u>+ 6</u>
9	17	5
<u>- 3</u>	<u>- 8</u>	<u>+ 5</u>
3	16	3
<u>+ 3</u>	<u>- 8</u>	<u>+ 2</u>
18	7	7
<u>- 9</u>	<u>+ 7</u>	<u>- 7</u>

Adding and Subtracting Game Board

5	10	13
7	0	18
12	9	9
6	6	14



Component	Math
Grade Level:	First Grade
Lesson Title:	Odd, Even, More, Less #1
Focus:	Number

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is an odd number? What is an even number? Give several examples of each. What does it mean if a number is more than another number? What does it mean if a numbers is less than another number? When would it be helpful for you to know whether a number is odd or even? When would it be helpful to know if a number is more or less in comparison to another number?

Content (the "Meat")								
Problem of the Day Joe went on a trip for 2 weeks. How many days was Joe gone? How do you know?						*Activity → Teachable Moment(s) <i>throughout</i>		
S	М	Т	W	TH	F	S]	During the lesson check in with students repeatedly.
1 2 3 4 5 6 7 8 9 10 11 12						Check in about what is happening and what they are		
13 20 27	14 21	15 22 20	16 23 20	17 23	18 25	19 26	-	thinking. Take advantage of any
							teachable moments. Stop the class and focus on a	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1							student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



3-1=2 After they have written the problem in all 4 w "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and You should have them practice this conversa students every day. On the 5 th day, you will the conversation will follow the pattern, but th through his/her cards (of course we hope the correct response. Today you will introduce this activity and beg Have students write the entire Fact Family of 6 + 8 = 14 8 + 6 = 14 14 - 6 = 8 15 - 8 = 6 Bring two students up to practice the converse Try it again with several other pairs of studer Then have children find a partner and practice Remember that today they are only doing the					
Math V Word for today: even Description: The term even refers to a num An even number can be divided by two ar numbers that end in the digits 0, 2, 4, 6, or 8 Have children complete the vocabulary noted	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.				
Vocabulary Notebook Sample: New Word even	students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can				
Personal Connection 10 is an even number.	Drawing	Vocabulary Notebooks can be made from ½ of a composition book.			
Ac	Focus on having young				
Odd, Even, More, Less Knowing whether a number is odd or even is said when you count by 2s. Odd numbers in Even numbers are the numbers that you say 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, and 22. Other terms that are important to understand	small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.				
whether something is 1 more, 1 less, 10 mor more familiar with numbers. Demonstrate several of odd. even, more. les					



about h	ow they have determined whether the number is odd, even, more or less.	
Odd, E Directi	ven, More, Less ons:	
Billooti		
1.	Divide students into pairs.	
2.	Give each pair a deck of Odd, Even, More, Less cards.	
3.	Together the pair draws a card, determines what the answer is, and then draws a second card.	
4.	Activity is over when students have reviewed each of the cards and determined if the numbers are odd, even, more or less.	

osing
view
brief

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Odd, Even, More, Less

What number is 1 more than 56?	What number is 10 more than 60?	What number is 1 less than 32?	What number is 1 less than 20?
What number is 10 more than 28?	What number is 10 less than 13?	What number is 10 less that 73?	What number is 1 more than 89?
What number is 10 more than 25?	What number is 1 more than 57?	What number is 1 less than 76?	What number is 1 more than 18?
What number is10 more than 28?	What number is 10 less than 65?	What number is 1 more than 3?	What number is 1 less than 92?
Is 28 odd or even?	Is 19 odd or even?	Is 37 odd or even?	Is 72 odd or even?
Is 64 odd or even?	Is 94 odd or even?	Is 21 odd or even?	Is 19 odd or even?
Is 26 odd or even?	Is 90 odd or even?	Is 53 odd or even?	Is 11 odd or even?



*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

Component	Math
Grade Level:	First Grade
Lesson Title:	Odd, Even, More, Less #2
Focus:	Number

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is an odd number? What is an even number? Give several examples of each. What does it mean if a number is more than another number? What does it mean if a numbers is less than another number? When would it be helpful for you to know whether a number is odd or even? When would it be helpful to know if a number is more or less in comparison to another number?

Content (the "Meat")

Problem of the Day

There are 9 pairs of socks in the laundry. How many socks are there all together?

Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$ then $2 + 1 = 3$ "	the group is thinking.
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



through his/her cards (of course we hope the correct response. Today you will introduce this activity and beg Have students write the entire Fact Family of 6 + 9 = 15 9 + 6 = 15 15 - 6 = 9 15 - 9 = 6 Bring two students up to practice the converse Try it again with several other pairs of studen Then have children find a partner and practice Remember that today they are only doing the		
Math V	ocabulary	It is important to review
Word for today: odd Description: The term odd refers to a num 2s. An odd number when divided by two wil numbers that end in the digits 1, 3, 5, 7, and Have children complete the vocabulary noted	academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have	
Vocabulary Notebook Sample:	My Description	Students experience the word
		right angle, multiple students
odd	1, 3, 5, 7, and 9 are odd	acting out an equation). Vocabulary Notebooks can
Personal Connection	Drawing	be made from 1/2 of a composition book
7 is an odd number.	even	
Ac	tivity	Focus on having young
Nu Odd, Even, More, Less Knowing whether a number is odd or even is said when you count by 2s. Odd numbers in Even numbers are the numbers that you say 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, and 22.	people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	
Other terms that are important to understand whether something is 1 more, 1 less, 10 mor more familiar with numbers.		
Demonstrate several of odd, even, more, les about how they have determined whether the		
Odd, Even, More, Less <u>Directions:</u> 1. Divide students into pairs. 2. Give each pair a deck of Odd, Even,		



Together the pair draws a card, determines what the answer is, and then draws a second card.
 Activity is over when students have reviewed each of the cards and determined if the numbers are odd, even, more or less.

Closing	
Review	
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
Debrief	
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
Give examples of even numbers.	
Give examples of odd numbers.	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.

1st Grade Odd, Even, More, Less

What number is 1 more than 56?	What number is 10 more than 60?	What number is 1 less than 32?	What number is 1 less than 20?
What number is 10 more than 28?	What number is 10 less than 13?	What number is 10 less that 73?	What number is 1 more than 89?
What number is 10 more than 25?	What number is 1 more than 57?	What number is 1 less than 76?	What number is 1 more than 18?
What number is10 more than 28?	What number is 10 less than 65?	What number is 1 more than 3?	What number is 1 less than 92?
Is 28 odd or even?	Is 19 odd or even?	Is 37 odd or even?	Is 72 odd or even?
Is 64 odd or even?	Is 94 odd or even?	Is 21 odd or even?	Is 19 odd or even?
Is 26 odd or even?	Is 90 odd or even?	Is 53 odd or even?	Is 11 odd or even?



Component	Math
Grade Level:	First Grade
Lesson Title:	Making Sense of Terms #1
Focus:	Mathematics

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What are some of the math terms that we use when we talk about math? Make a list of those words. Encourage children to look in their Vocabulary Notebook. What are some of the words that tell us position? (right, left, up, down, between, over, under). Ask children to stand up and act out those words.

Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>	
Jill, Jack, and Mary each picked strawberries. Jill picked 4 baskets. Jack picked 3 baskets. Mary picked 6 baskets. Write a number sentence to show how you will find the total number of baskets strawberries.	During the lesson check in with students repeatedly.	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



Today you will introduce this activity and begin with the Fact Family of 3, 5, and 8. Have students write the entire Fact Family on the white board. 3 + 5 = 8 5 + 3 = 8 8 - 3 = 5 8 - 5 = 3 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 3, 5 and 8.			
Math Vocabulary Word for Today: term Description: The word "term" refers to words that have a particular meaning in mathematics. For example, the word "carry" means to hold something in your arms. In math it means to move tens to the left if a sum is 10 or over. Other terms are positional like over, under, right, left, between, and so on. Have children make an entry in the Vocabulary Notebook for the word term.		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students	
New Word	My Description	acting out an equation).	
term	a word that describes math	be made from $\frac{1}{2}$ of a composition book.	
Personal Connection	Drawing		
What does the term "over" mean?	term		
Acti	vity	Focus on having young	
Math Termspeople "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.Making Sense of Key TermsThere are some key terms that 1st graders need to understand. Some of those terms are: near, far, below, above, up, down, behind, in front of, next to, left, right. In order to ensure that children understand these concepts it is important that they practice. Today you are going to give the children a grid and then you are going to make statements and ask them to draw or write the symbol that answers the question.people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.Practice with the children first by reviewing the terms above and also illustrating things on the board and asking them questions about those pictures.people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.Divide students into pairs and give each pair a grid and crayons.The questions to ask the children are attached to this lesson plan.			



	Closing
	Review
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
	Debrief
What did you like about today's lesson?	
How can you use the information from today during class	tomorrow?
What is one key learning you had today in math?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Making Sense of Key Terms

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2	=	••	5		



1st Grade Making Sense of Key Terms

- 1. Draw a picture of what is below the star.
- 2. Draw a picture of what is to the right of the heart.
- 3. What is above the 7? Draw it.
- 4. Start on the equals sign. Move 2 spaces up. Draw what you see there.
- 5. What is the left of the 3? Draw it.
- 6. Start on the arrow in the upper right hand corner. Move 2 spaces down and draw what you see there.
- 7. What is next to the square? Draw it.
- 8. What two items are nearest to the 2? Draw them.
- 9. What item is furthest from the square? Draw it.
- 10. What surrounds the star? Draw those items.
- 11. What is to the left of the plus sign? Draw it.
- 12. What is above the 5? Draw it.
- 13. What is below the H? Draw it.
- 14. What is far away from the 2? Draw it.
- 15. What two items are nearest to the B? Draw them.
- 16. What is under the sad face? Draw it.
- 17. What is to the right of the triangle? Draw it.
- 18. What is below the heart? Draw it.
- 19. What is below the 3? Draw it.
- 20. What is between the happy face and the circle? Draw it.



Component	Math
Grade Level:	First Grade
Lesson Title:	Making Sense of Terms #2
Focus:	Mathematics

Materials:

White boards Crayolas

Socks

Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What are some of the math terms that we use when we talk about math? Make a list of those words. Encourage children to look in their Vocabulary Notebook. What are some of the words that tell us position? (right, left, up, down, between, over, under). Ask children to stand up and act out those words.

Content (the "Meat")				
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>			
Lisa has one blue shirt and one red shirt. She has 1 green skirt and 1 yellow skirt. How many different outfits can she wear? Draw a picture of your answer.	During the lesson check in with students repeatedly.			
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.			
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.			
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to			
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$ then $2 + 1 = 3$ "	the group is thinking.			
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.			
Today you will introduce this activity and begin with the Fact Family of 4, 5, and 9.				



Have students write the entire Fact Family on t 4 + 5 = 9 5 + 4 = 9 9 - 4 = 5 9 - 5 = 4 Bring two students up to practice the conversa Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the f give you examples of doubles. Ask students to families.	
Math Voo Word for Today: term Description: The word "term" refers to words mathematics. For example, the word "carry" m math it means to move tens to the left if a sum over, under, right, left, between, and so on. Have children make an entry in the Vocabulary Vocabulary Notebook Sample: New Word term	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection What does the term "over" mean?	
Active Math T Making Sense of Key Terms There are some key terms that 1 st graders nee near, far, below, above, up, down, behind, in fr that children understand these concepts it is in Today you are going to give the children a grid and ask them to draw or write the symbol that Practice with the children first by reviewing the the board and asking them questions about the Divide students into pairs and give each pair a The questions to ask the children are attached	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



	Closing
	Review
Say:	
• Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do m	hath?
Give an example of how you will use what we did today i	n school tomorrow.

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Making Sense of Key Terms

В	Η		3		ł
X		\sum		7	+
2	=	••	5		



1st Grade Making Sense of Key Terms

- 1. Draw a picture of what is below the star.
- 2. Draw a picture of what is to the right of the heart.
- 3. What is above the 7? Draw it.
- 4. Start on the equals sign. Move 2 spaces up. Draw what you see there.
- 5. What is the left of the 3? Draw it.
- 6. Start on the arrow in the upper right hand corner. Move 2 spaces down and draw what you see there.
- 7. What is next to the square? Draw it.
- 8. What two items are nearest to the 2? Draw them.
- 9. What item is furthest from the square? Draw it.
- 10. What surrounds the star? Draw those items.
- 11. What is to the left of the plus sign? Draw it.
- 12. What is above the 5? Draw it.
- 13. What is below the H? Draw it.
- 14. What is far away from the 2? Draw it.
- 15. What two items are nearest to the B? Draw them.
- 16. What is under the sad face? Draw it.
- 17. What is to the right of the triangle? Draw it.
- 18. What is below the heart? Draw it.
- 19. What is below the 3? Draw it.
- 20. What is between the happy face and the circle? Draw it.



Component	Math
Grade Level:	First Grade
Lesson Title:	What Time Is It? #1
Focus:	Time

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Focus Student's Prior Knowledge

What do you know about telling time? What is an analog clock? Draw one and show the time 3:00. How many numbers are on the clock face? How do you write time?

Content (the "Meat")				
Problem of the Day Draw and AB pattern. How do you know that you are correct?	*Activity → Teachable Moment(s) <i>throughout</i>			
Problem of the Day Draw and AB pattern. How do you know that you are correct? Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 5, 5, and 10.	 *Activity → Teachable Moment(s) throughout During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. 			
5 + 5 = 10 5 + 5 = 10				



10-5=5 10-5=5 Bring two students up to practice the conversa Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the		
Math Vo Word for Today: time Description: The term time refers to a way w weeks, months, and years. Time is usually m on an analog clock (round face with 12 numbe calendars. Before clocks, people used the su Have children review the Vocabulary noteboo Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students	
New Word My Description time seconds, minutes, hours, days, weeks, months, and years		acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection What time is it?		
Acti Tin Measuring Time There are two kinds of clocks. One is the ana numbers 1-12 around the edge of the circle. I the hour and a minute hand that points to the hour hand. When the minute hand points to the is pointing to and then say "o'clock". For insta and the minute hand is pointing to the 12, we minute hand is pointing to the six, we look at t follow by the word thirty. When the minute hand we would say, four thirty, 4:30. It is expected an analog clock to the hour and the half hour of The second kind of clock is a digital clock. A for The hour is the first number written. It is follow about the minutes. The time is written 4:00 or Draw several clocks on the board or chart pap- indicating. Practice until the children are com-	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.	



What Time Is It?

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a set of What Time Is It cards.
- 3. Shuffle the cards and place the 20 cards face down in a 5 by 4 grid.
- 4. Player 1 turns over two cards, trying to match an analog and digital clock with the same time.
- 5. If player is successful, he/she keeps the cards. If not successful, he/she returns the cards to the spot they were in, placing them face down.
- 6. Game is over when all of the cards have been collected.

	Closing	
	Review	
Say:		
Please recap what we did today.		
 Did we achieve our objectives? 		
	Debrief	
What did you like about what we did today in math?		
What is an analog clock?		
What is a digital clock?		

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade What Time Is It?

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9:30	11:30	6:30	11:00
2:30	8:30	4:30	10:30
1:00	5:00	7:00	9:00
7:30	12:30	6:00	2:00
1:30	10:00	4:00	8:00



Component	Math
Grade Level:	First Grade
Lesson Title:	What Time Is It? #2
Focus:	Time

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about telling time? What is an analog clock? Draw one and show the time 3:00. How many numbers are on the clock face? How do you write time?

Content (the "Meat")			
Problem of the Day There are 17 boys and 11 girls in Mrs. Jones' class. How many students are in the class all together? How many more boys than girls?	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in		
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 5, 6, and 11. Have students write the entire Fact Family on the white board. 5 + 6 = 11	 During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. 		



6 + 5 = 11 11 - 5 = 6 11 - 6 = 5 Bring two students up to practice the conversa Try it again with several other pairs of student Then have children find a partner and practice Remember that today they are only doing the			
Math Vo Word for Today: time Description: The term time refers to a way w weeks, months, and years. Time is usually m on an analog clock (round face with 12 number calendars. Before clocks, people used the su Have children review the Vocabulary noteboo Vocabulary Notebook Sample:	It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students		
New Word time	My Description seconds, minutes, hours, days, weeks, months, and years	acting out an equation). Vocabulary Notebooks can be made from ½ of a composition book.	
Personal Connection What time is it?	Drawing 4:30		
Act Time Measuring Time There are two kinds of clocks. One is the anar numbers 1-12 around the edge of the circle. If the hour and a minute hand that points to the hour hand. When the minute hand points to the is pointing to and then say "o'clock". For insta and the minute hand is pointing to the 12, we minute hand is pointing to the six, we look at the follow by the word thirty. When the minute hand we would say, four thirty, 4:30. It is expected an analog clock to the hour and the half hour of The second kind of clock is a digital clock. A The hour is the first number written. It is follow about the minutes. The time is written 4:00 or (Draw several clocks on the board or chart pap indicating. Practice until the children are com	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.		



What Time Is It?

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a set of What Time Is It cards.
- 3. Shuffle the cards and place the 20 cards face down in a 5 by 4 grid.
- 4. Player 1 turns over two cards, trying to match an analog and digital clock with the same time.
- 5. If player is successful, he/she keeps the cards. If not successful, he/she returns the cards to the spot they were in, placing them face down.
- 6. Game is over when all of the cards have been collected.

	Closing	
	Review	
Say:		
Please recap what we did today.		
 Did we achieve our objectives? 		
	Debrief	
What did you like about what we did today in math?		
What do you know about a calendar?		
What are the names of the month?		
What are the names of the days of the week?		

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade What Time Is It?

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9:30	11:30	6:30	11:00
2:30	8:30	4:30	10:30
1:00	5:00	7:00	9:00
7:30	12:30	6:00	2:00
1:30	10:00	4:00	8:00


Component	Math
Grade Level:	First Grade
Lesson Title:	Student Activity Choice
Focus:	Review

Materials:

White boards Crayolas Socks (use for erasers) Materials for games played the past 10 days

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Ask children what they know about addition and subtraction. Ask them to share what they do to write number sentences? Ask them about story problems and how they connect to number sentences?

Content (the "Meat")	
Problem of the Day The store has 5 Raggedy Ann dolls. Each doll has 2 button eyes. How many buttons are there on all of the Raggedy Ann dolls?	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in with students repeatedly.
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Check in about what is happening and what they are thinking. Take advantage of any
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
correct response. Today you will introduce this activity and begin with the Fact Family of 7, 5, and 12 Have students write the entire Fact Family on the white board.	



5 + 7 = 12 7 + 5 = 12 12 - 5 = 7 12 - 7 = 5	
Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 7, 5, and 12.	
Activity Today is a review day. Students should select from the following list of activities: Greater Than, Less Than Addition or Subtraction Odd, Even, More, Less Making Sense of Terms What Time Is It?	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

	Closing
	Review
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
	Debrief
Which of the games did you enjoy playing the most?	
What about this game is fun for you?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	First Grade
Lesson Title:	Name Those Coins #1
Focus:	Money

Materials:

White boards Crayolas dice (3 for each pair)

Socks (for erasers)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about money.

Gain prior knowledge by asking students the following questions

What do you know about money? What are the common coins that we use? What are the common bills? If you think of the common coins, how many of each does it take to make a dollar? What two ways can you write money?

Content (the "Meat")	
Problem of the Day John's kite has 6 sides. Mark's kite has 6 sides. Louis has 6 sides as well. How many	*Activity → Teachable Moment(s) <i>throughout</i>
sides are there in total?	During the lesson check in with students repeatedly.
	Check in about what is happening and what they are thinking.
Fact Practice	Take advantage of any teachable moments.
ract Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.
3-2=1 3-1=2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	



correct response. Today you will introduce this activity and begin with the Fact Family of 5, 8, and 13. Have students write the entire Fact Family on the white board. 5 + 8 = 13 8 + 5 = 13 13 - 5 = 8 13 - 8 = 5 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 5, 8 and 13		
Math Vo	cabulary	It is important to review
Word for Today: coins		academic math vocabulary
Description: The term coin refers to the pennies, nickels, dimes, and quarters that we use. These coins can equal a dollar. There are 100 pennies in \$1.00. There are 20 nickels in \$1.00. There are 10 dimes in \$1.00. There are 4 quarters in \$1.00. There are other comparisons that we need to be able to make. Pennies to nickels and dimes, ways to make \$.25, and so on.		often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word
Review the entry for the term "coin" in your Vo	ocabulary Notebook. Share with a peer.	(Ex. 4 students creating a right angle, multiple students
New Word	My Description	acting out an equation).
		Vocabulary Notebooks can
coin	penny, nickel, dime and quarter	be made from ½ of a composition book.
Personal Connection	Drawing	
I have 25¢ in my pocket.	Contraction of the second	
Students will complete this notebook for each	vocabulary word that they are given.	
Act	ivity	Focus on having young
Мо	ney	people "compete" in pairs or
Money Review During the year we have looked at the different coins we have in America. We have four main coins: penny, nickel, dime, and quarter. A penny is worth 1 cent, a nickel worth 5 cents, a dime worth 10 cents and a quarter worth 25 cents. We can note money that is less than a dollar by using the cent sign: ϕ , or by writing the amount as a part of a dollar: \$.**.		small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
When calculating the value of a group of coins, start with the value of the largest coin and then work your way down to the smallest. For example, if you have a quarter, dime, three nickels and 2 pennies, you would start with 25ϕ , add 10ϕ to make 35ϕ (this is like counting by tens), then you would count by 5s for the three nickels: beginning at 35ϕ , 1 nickel would make 40ϕ , a second nickel 45ϕ , the third nickel 50ϕ , and then you would		



count 2 additional pennies, saying 51ϕ and finally 52ϕ . Practice counting coins in this way until the children are comfortable counting the coins.

Then reverse the process, writing the total and then asking children to start with the largest coin, and keep adding coins until they reach the total. For example if the total is 79¢, you would start with a quarter for 25¢, a second quarter for 50¢, and finally a third quarter for 75¢, and then 4 pennies to reach 79¢. Demonstrate how you would draw the coins by making circles and putting the coin value inside.

Name Those Coins

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a Name Those Coins card and a piece of paper.
- 3. Ask students to fold the paper so they have 16 rectangles.
- 4. Working together, students will look at the amount of money and then draw that amount on the paper, using as few coins as possible.
- 5. When pair is finished, pair should meet with another group and compare work.

Closing

Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?

Debrief

What did you like about what we did today in math?

What would you like to do more of the next time we do math?

What does it mean when we say we found an answer by addition?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Name Those Coins

40¢	65¢	54¢	72¢
\$.96	\$.43	\$.35	\$.45
60¢	70¢	29¢	47¢
\$.75	\$.41	\$.86	\$.78
64¢	52¢	31¢	19¢
\$.23	\$.39	\$.69	\$.84



Component	Math
Grade Level:	First Grade
Lesson Title:	Name Those Coins #2
Focus:	Money

Materials:

White boards Crayolas Socks Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction? What are the words we use to describe the answers in an addition problem? What are the words we use to describe the answers in a subtraction problem? Write several addition and subtraction problems on the board. Ask children to come to the board and solve the problems.

Content (the "Meat")		
Problem of the Day Write the largest three digit number you can using the digits below.	*Activity → Teachable Moment(s) <i>throughout</i>	
Write the largest three digit number you can using the digits below. 3 8 2 Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students even day. On the 5 th day, you will will yill a problems from the days before, and	Moment(s) throughout During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn"	
the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	opportunity and have the student become the teacher.	



Today you will introduce this activity and begin with the Fact Family of 5, 9, and 14. Have students write the entire Fact Family on the white board. 5 + 9 = 14 9 + 5 = 14 14 - 5 = 9 14 - 9 = 5 Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 5, 9, and 14. Share with students that this fact is a double—the addends are the same.		
Math Vo	ocabulary	It is important to review
Word for Today: coins Description: The term coin refers to the pen These coins can equal a dollar. There are 10 \$1.00. There are 10 dimension \$1.00. There are	nies, nickels, dimes, and quarters that we use. 0 pennies in \$1.00. There are 20 nickels in	academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word
comparisons that we need to be able to make make \$.25, and so on.	e. Pennies to nickels and dimes, ways to	When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students
Review the entry for the term "coin" in your Vo Vocabulary Notebook Sample:	ocabulary Notebook. Share with a peer.	
New Word	My Description	acting out an equation)
coin	penny, nickel, dime and quarter	be made from $\frac{1}{2}$ of a composition book
Personal Connection	Drawing	
I have 25¢ in my pocket.	Lacar Carlos	
Students will complete this notebook for each	vocabulary word that they are given.	
Activity Money		Focus on having young people "compete" in pairs or small groups. Once a game
Money Review During the year we have looked at the different coins we have in America. We have four main coins: penny, nickel, dime, and quarter. A penny is worth 1 cent, a nickel worth 5 cents, a dime worth 10 cents and a quarter worth 25 cents. We can note money that is less than a dollar by using the cent sign: ¢, or by writing the amount as a part of a dollar: \$.**.		is mastered you can utilize it in the "When Homework Is Complete" center.
When calculating the value of a group of coin and then work your way down to the smallest three nickels and 2 pennies, you would start v counting by tens), then you would count by 5s	s, start with the value of the largest coin . For example, if you have a quarter, dime, with 25¢, add 10¢ to make 35¢ (this is like s for the three nickels: beginning at 35¢, 1	



nickel would make 40ϕ , a second nickel 45ϕ , the third nickel 50ϕ , and then you would count 2 additional pennies, saying 51ϕ and finally 52ϕ . Practice counting coins in this way until the children are comfortable counting the coins.

Then reverse the process, writing the total and then asking children to start with the largest coin, and keep adding coins until they reach the total. For example if the total is 79¢, you would start with a quarter for 25¢, a second quarter for 50¢, and finally a third quarter for 75¢, and then 4 pennies to reach 79¢. Demonstrate how you would draw the coins by making circles and putting the coin value inside.

Name Those Coins Directions:

- 1. Divide students into pairs.
- 2. Give each pair a Name Those Coins card and a piece of paper.
- 3. Ask students to fold the paper so they have 16 rectangles.
- 4. Working together, students will look at the amount of money and then draw that amount on the paper, using as few coins as possible.
- 5. When pair is finished, pair should meet with another group and compare work.

Closing
Review
Say:
Please recap what we did today.Did we achieve our objectives?
Debrief
What did you like about what we did today in math?
What would you like to do more of the next time we do math?
Name the coins and the value of each.

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Name Those Coins

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40¢	65¢	54¢	72¢
\$.96	\$.43	\$.35	\$.45
60¢	70¢	29¢	47¢
\$.75	\$.41	\$.86	\$.78
64¢	52¢	31¢	19¢
\$.23	\$.39	\$.69	\$.84



Component	Math
Grade Level:	First Grade
Lesson Title:	How Many Pieces #1
Focus:	Fractions

Materials:

White boards Crayolas Socks (for erasers) dice (3 for each pair)

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about fractions? What does the top number represent? How about the bottom number? If you have ³/₄ you have 3 of the 4 pieces you would have if you had a whole thing. What are some other common fractions that you know?

Content (the "Meat")			
Problem of the Day There are 14 cupcakes on the plate. John eats 3 cupcakes. Millie eats 2 cupcakes. How many cupcakes are still on the plate? How do you know?	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in		
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 6, 6, and 12. Have students write the entire Fact Family on the white board.	with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.		



6 + 6 = 12		
6 + 6 = 12		
12 – 6 = 6		
12 – 6 = 6		
Bring two students up to practice the converse	ation.	
Try it again with several other pairs of student	S.	
Then have children find a partner and practice	the conversation. Do this at least 4 times.	
Remember that today they are only doing the	Fact Family of 6, 6 and 12.	
Math Vo	cabulary	It is important to review
Word for Today: fraction	ou o	academic math vocabulary
Description: The fraction represents less that denominator, tells you how many pieces there number, the numerator, tells you how many o	an a whole. The bottom number, the are if you had the whole thing. The top f the total number of pieces you have. If you	Complete the Vocabulary notebook for each word. When possible, have students experience the word
have the fraction ³ / ₄ , it means that you have 3 into.	of the 4 pieces the whole thing was divided	
Create an entry for the term "fraction" in your Vocabulary Notebook Sample:	Vocabulary Notebook. Share with a peer.	(Ex. 4 students creating a right angle, multiple students
New Word	My Description	acting out an equation).
fraction	two numbers, one on top of the other, that indicate less than a whole item	Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection	Drawing	
I will each ½ of a sandwich for lunch.	12	
Act	ivity	Focus on having young
Frac	tions	people "compete" in pairs or small groups. Once a game
Fractions		is mastered you can utilize it
A fraction is a way to represent a part of a wh	ole For example when you eat a sandwich	in the "When Homework Is
it has probably been cut in half and you eat $\frac{1}{2}$	at a time Sometimes you need to divide a	Complete" center.
cookie between you and your friend and you	each end up with ½. If you get pizza, you	
don't usually eat the whole pizza, and most pi	zzas are divided into 8 pieces, so each piece	
vou eat is 1/8 of the whole pizza.	,,	
Fractions have two numbers. The bottom nur	nber tells vou how many pieces vou have	
divided the whole thing into (2 pieces of cooki	e. 8 pieces of pizza), and the top number tells	
you how much of the whole thing, or the num		
a cookie, you have one of the two pieces. If y		
pizza-three of the eight pieces in a whole pizza.		
Work through several problems with children. Use a denominator of 1, 2, 3, 4, or 8 only.		
When students are comfortable identifying and writing the fractions represented, they are		
ready to play the game below.		
How Many Pieces?		
Directions:		
1 Divide students into pairs		



Give each pair a How Many Pieces card and either a white board or paper.
 Working together the pair will identify a fraction to explain the drawing, or draw a picture to explain the fraction.
 When paid is finished, they should join another pair and compare the work they have done as well as the key learning.

Closing	
Review	
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
Debrief	
What did you like about what we did today in math?	
What would you like to do more of the next time we do math?	
What is a number?	
What is a letter?	
Are they the same?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade How Many Pieces?





Component	Math
Grade Level:	First Grade
Lesson Title:	How Many Pieces? #2
Focus:	Fractions

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about fractions? What does the top number represent? How about the bottom number? If you have ³/₄ you have 3 of the 4 pieces you would have if you had a whole thing. What are some other common fractions that you know?

Content (the "Meat")		
Problem of the Day The sun sets in the west every day. Is it likely that the sun will set in the west today?	*Activity → Teachable Moment(s) <i>throughout</i>	
Explain your thinking.	During the lesson check in with students repeatedly.	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.	
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.	
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open-ended questions to	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	determine what the rest of the group is thinking.	
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
Today you will introduce this activity and begin with the Fact Family of 3, 4, and 7.		





Have students write the entire Fact Family on 3 + 4 = 7 4 + 3 = 7 7 - 4 = 3 7 - 3 = 4		
Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the		
Math Vo	cabulary	It is important to review
Word for Today: fraction		academic math vocabulary
Description: The fraction represents less than a whole. The bottom number, the denominator, tells you how many pieces there are if you had the whole thing. The top number, the numerator, tells you how many of the total number of pieces you have. If you have the fraction ³ / ₄ , it means that you have 3 of the 4 pieces the whole thing was divided into.		often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word
Create an entry for the term "fraction" in your V Vocabulary Notebook Sample:	/ocabulary Notebook. Share with a peer.	(Ex. 4 students creating a right angle, multiple students
New Word	My Description	acting out an equation).
fraction	two numbers, one on top of the other, that indicate less than a whole item	Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection	Drawing	
I will each $\frac{1}{2}$ of a sandwich for lunch.	12	
Students will complete this notebook for each	vocabulary word that they are given.	
Activity Fractions Fractions A fraction is a way to represent a part of a whole. For example, when you eat a sandwich, it has probably been cut in half and you eat ½ at a time. Sometimes you need to divide a cookie between you and your friend and you each end up with ½. If you get pizza, you don't usually eat the whole pizza, and most pizzas are divided into 8 pieces, so each piece you eat is 1/8 of the whole pizza. Fractions have two numbers. The bottom number tells you how many pieces you have divided the whole thing into (2 pieces of cookie, 8 pieces of pizza), and the top number tells you how much of the whole thing, or the number of pieces that you have. If you have ½ of a cookie, you have one of the two pieces. If you eat 3 pieces of pizza, you have 3/8 of the pizza—three of the eight pieces in a whole pizza.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
When students are comfortable identifying and writing the fractions represented, they are ready to play the game below.		



Directions:

- 1. Divide students into pairs.
- 2. Give each pair a How Many Pieces card and either a white board or paper.
- 3. Working together the pair will identify a fraction to explain the drawing, or draw a picture to explain the fraction.
- 4. When paid is finished, they should join another pair and compare the work they have done as well as the key learning.

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
How can you use the information from today in school	tomorrow?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade How Many Pieces?





Component	Math
Grade Level:	First Grade
Lesson Title:	Gummy Bears Graph
Focus:	Graphs

Materials:	
White boards	Activity at the end of this lesson plan
Crayolas	Gummy Bears
Socks (for erasers)	2 ounce Dixie Cups

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is a graph? When do you use them? How do you make one? Why is it that sharing information this way is very powerful and helps people to understand what you are trying to communicate? What is a bar graph?

Content (the "Meat")		
Problem of the Day	*Activity → Teachable	
Stamps cost 44¢. If you have 2 stamps, how much do the stamps cost?	Moment(s) <i>throughout</i>	
Fact Practice	During the lesson check in	
Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	with students repeatedly.	
and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is	
another in adding and subtracting. Fact practice will follow this pattern every day.	happening and what they are	
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	thinking.	
They will write the problem in four ways.	Take advantage of any	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 3, 5, and 8.	teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



3 + 5 = 8		
5 + 3 = 8		
8 - 3 = 5		
0 - 0 - 0	ation	
The students up to practice the conversa		
Then have children find a partner and practice	s. The conversation . Do this at least 4 times	
Remember that today they are only doing the	Fact Family of 3 5 and 8	
Math Vocabulary Word for today: graph Description: The term graph refers to a diagram of value that is in either lines or bars. You collect information and data and then share it with others through this diagram.		academic math vocabulary often throughout the day. Complete the Vocabulary
Graphs are used to make information clear to	everyone.	notebook for each word.
Have children complete the vocabulary noteb Vocabulary Notebook Sample:	ook for the word graph.	When possible, have students experience the word
New Word	My Description	(Ex. 4 students creating a right angle, multiple students
graph	a chart that shows values of certain items	acting out an equation). Vocabulary Notebooks can
Personal Connection	Drawing	be made from ½ of a composition book.
I made a graph to show how many people like raisins.		
Activity		Focus on having young
Gra	aphs	people "compete" in pairs or
A graph is a diagram that usually shows values as lines or bars. By looking at a graph we can quickly understand information.		small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Graph several things with the students, creating the graph as you go. The first graph should be the age of the students. You could possibly have 3 different ages. Ask students to stand in a line the represents the age they currently are. Have each child come up and draw a face on the graph under their age. Then compare the data that the graph shows. The second graph you can make with children is to have them stand in a line based on the month they were born. Repeat the process that you did for age.		
Explain that today they are going to graph Gummy Bears. Each pair will be given a number of Gummy Bears and that they will need to graph them. Discuss how they might graph the bears (probably the attribute of color will be the best choice). After you have explained the activity, students are ready to work on the activity.		
 Gummy Bears <u>Directions:</u> Divide students into pairs. Give each pair a cup or package of Gummy Bears, a piece of paper and a box of crayons. Ask each pair to work together to create a graph that they can share with other 		



4.	students that will demonstrate the Gummy Bears they have. Have students create at least 3 questions that can be answered by their graph.	
5. 6.	When graphs are finished, have pairs share the graphs with the class. When the sharing is finished, pair may eat the Gummy Bears.	

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of next time?	
What are 8 different even numbers?	
What are 8 different odd numbers?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	First Grade
Lesson Title:	Lucky Charms Graph
Focus:	Graphs

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is a graph? When do you use them? How do you make one? Why is it that sharing information this way is very powerful and helps people to understand what you are trying to communicate? What is a bar graph?

Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>	
Write the numbers below from the smallest to the largest.	During the lesson check in with students repeatedly.	
41 37 56 73 46 65	Check in about what is	
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition	happening and what they are thinking.	
and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.	Take advantage of any teachable moments.	
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking.	
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	



correct response. Today you will introduce this activity and begin Have students write the entire Fact Family on t 3 + 6 = 9 6 + 3 = 9 9 - 3 = 6 9 - 6 = 3 Bring two students up to practice the conversa Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the F		
Math Vocabulary Word for today: graph Description: The term graph refers to a diagram of value that is in either lines or bars. You collect information and data and then share it with others through this diagram. Graphs are used to make information clear to everyone. Have children complete the vocabulary notebook for the word graph. Vocabulary Notebook Sample:		It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word
New Word graph	My Description a chart that shows values of certain items	(Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can
Personal Connection I made a graph to show how many people like raisins.	Drawing	be made from ½ of a composition book.
Activity Graphs A graph is a diagram that usually shows values as lines or bars. By looking at a graph we can quickly understand information. Graph several things with the students, creating the graph as you go. The first graph should be the age of the students. You could possibly have 3 different ages. Ask students to stand in a line the represents the age they currently are. Have each child come up and draw a face on the graph under their age. Then compare the data that the graph shows. The second graph you can make with children is to have them stand in a line based on the month they were born. Repeat the process that you did for age. Explain that today they are going to graph Lucky Charms. Each pair will be given a number of Lucky Charms and that they will need to graph them. Discuss how they might graph the cereal (color, shapes, etc.). After you have explained the activity, students are ready to work on the activity.		Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
Lucky Charms <u>Directions:</u> 1. Divide students into pairs.		



Give each pair a cup of Lucky Charms, a piece of paper and a box of crayons.
 Ask each pair to work together to create a graph that they can share with other students that will demonstrate the Lucky Charms they have.
 Have students create at least 3 questions that can be answered by their graph.
 When graphs are finished, have pairs share the graphs with the class.
 When the sharing is finished, pair may eat the Lucky Charms.

(Closing
	Review
Say:	
 Please recap what we did today. 	
 Did we achieve our objectives? 	
	Debrief
What did you like about what we did today in math?	
What would you like to do more of the next time we do ma	th?
Give examples of even numbers.	
Give examples of odd numbers.	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



Component	Math
Grade Level:	First Grade
Lesson Title:	Stories to Number Sentences #1
Focus:	Word Problems

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of this lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about word problems? How do the words inform a number sentence? If you have the number sentence 3 + 5 = 8, what is the story that could go along with it? If you have the story, John has 3 flowers. Mark has 8 flowers. How many do they have altogether? What is the number sentence you would write?

Content (the "Meat")		
Problem of the Day Look at the diagram below. What kind of ice cream does Sue like?	*Activity → Teachable Moment(s) <i>throughout</i>	
Nan loe	During the lesson check in with students repeatedly.	
Len Sue Bo	Check in about what is happening and what they are thinking.	
chocolate strawberry	Take advantage of any teachable moments.	
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1 + 2 = 3$ $2 + 1 = 3$ $3 - 2 = 1$ $3 - 1 = 2$ After they have written the problem in all 4 ways they will find a partner and say,	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
"If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will reasoned with "Yes, and since that is true $2 - 1 = 0$ and $2 - 0 = 1$ "		
I ne other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".		



You should have them practice this conversation students every day. On the 5 th day, you will ut the conversation will follow the pattern, but the through his/her cards (of course we hope they correct response. Today you will introduce this activity and begin Have students write the entire Fact Family on the 3 + 7 = 10 7 + 3 = 10 10 - 3 = 7 10 - 7 = 3 Bring two students up to practice the conversa Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the f		
Math Voc	cabulary	It is important to review
Math Vocabulary Word for Today: word problems Description: Math problems tell a story. Because we practice so often with just number sentences, 5 + 3 = 8, we forget that there is a story that caused the number sentence to be written in the way that it is. When we read a story, it is important to pay attention to the key words in the story so we know how to craft the number sentence. Have children make an entry in the Vocabulary Notebook for the term word problems. Vocabulary Notebook Sample:		academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).
word problems	the story that informs the number sentence	Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection	Drawing	
The word problem said to add 3 cookies and 5 cookies.	1 rose + 1 rose = 2 roses	
Activity Word Problems		Focus on having young people "compete" in pairs or
Most of the time math problems don't come in the format of numbers only. They come in the form of real-life problems that need to be answered. These problems are found in word problems. When students read the problems they must ask themselves what they are trying to find out. They then create a number sentence that represents the words. For example: 1. Joe has 8 cookies. Mark has 5 cookies. How many cookies do they have in all?		small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.
 8 cookies + 5 cookies = 13 cookies in all The first is the problem, the second the number sentence representing the problem. 		



Sometimes you are given a number sentence and then are asking to create the story that goes along with the sentence. Work through several examples with students, going from number sentence to story, and story to number sentence.	
Word Problems	
Directions:	
1. Divide students into pairs.	
2. Give each pair a Word Problem card and white board.	
3. Working together, students create number sentences from the word problems, and word problems from the number sentences.	
 When pairs are finished, pair shares with another pair to see what each group has done. 	
 Bring group together and have children share several of the stories they have developed to explain the number sentence. 	

(Closing
	Review
Say:	
• Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
What did you like about today's lesson?	
How can you use the information from today during class t	tomorrow?
What is one key learning you had today in math?	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Word Problems

A green string is 8 inches long. A blue string is 4 inches long. If you put the strings together, how long will it be?	It's lunch time. There are 12 students sitting at the green table and 21 students at the purple table. How many students are there all together?
You are in the library. There are 13 books on the top shelf and 25 books on the bottom shelf. How many books all together?	Lily had 38 cookies to take to school. She gave away 13 cookies before she got to school. How many cookies did she have when she got to school?
There are 11 cats sitting on the step. 5 cats get up and walk away. How many cats are left sitting on the step?	Joe read 18 books. Robin read 11 books. How many books did they read together?
8 + 7 = 15	9 + 12 = 21
4 + 3 = 7	37 – 12 = 25
18 – 6 = 12	57 – 34 =



Component	Math	
Grade Level:	First Grade	
Lesson Title:	Stories to Number Sentences #2	
Focus:	Word Problems	

Materials:

White boards Crayolas

Socks

Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What do you know about word problems? How do the words inform a number sentence? If you have the number sentence 6 + 5 = 11, what is the story that could go along with it? If you have the story, John has 9 marbles. He gives 5 to Mark. How many does he have left? What is the number sentence you would write?

Content (the "Meat")					
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>				
John has 14 cupcakes. He hides 7 of them. How many cupcakes are hidden?	During the lesson check in with students repeatedly.				
Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one	Check in about what is happening and what they are thinking.				
another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)	Take advantage of any teachable moments.				
They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to				
After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ".	the group is thinking.				
The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.				
Today you will introduce this activity and begin with the Fact Family of 3, 8, and 11.					



Have students write the entire Fact Family on t 3 + 8 = 11 8 + 3 = 11 11 - 3 = 8 11 - 8 = 3 Bring two students up to practice the conversal Try it again with several other pairs of students Then have children find a partner and practice Remember that today they are only doing the F give you examples of doubles. Ask students to families.		
Math Voc	abulary	It is important to review
Word for Today: word problems Description: Math problems tell a story. Beca sentences, $5 + 3 = 8$, we forget that there is a s written in the way that it is. When we read a st words in the story so we know how to craft the Have children review the entry in the Vocabula	often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students	
New Word	My Description	acting out an equation).
word problems	the story that informs the number sentence	Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection	Drawing	
The word problem said to add 3 cookies and 5 cookies.	1 rose + 1 rose = 2 roses	
Activ Word Pro	vity oblems	Focus on having young people "compete" in pairs or
Most of the time math problems don't come in the form of real-life problems that need to be a problems. When students read the problems the trying to find out. They then create a number sexample:	is mastered you can utilize it in the "When Homework Is Complete" center.	
I. JOE NAS & COOKIES. MARK NAS 5 COOKIES. HO		
2. 8 cookies + 5 cookies = 13 cookies in all The first is the problem, the second the numbe		
Sometimes you are given a number sentence a goes along with the sentence. Work through several examples with students,	and then are asking to create the story that going from number sentence to story, and	



story to number sentence.

Word Problems

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a Word Problem card and white board.
- 3. Working together, students create number sentences from the word problems, and word problems from the number sentences.
- 4. When pairs are finished, pair shares with another pair to see what each group has done.
- 5. Bring group together and have children share several of the stories they have developed to explain the number sentence.

	Closing	
	Review	
Say:		
• Please recap what we did tod	ay.	
• Did we achieve our objectives	?	
	Debrief	
What did you like about what we did to	oday in math?	
What would you like to do more of the	next time we do math?	
Give an example of how you will use v	vhat we did today in school tomorrow.	

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade Word Problems

	1
A green string is 8 inches long. A blue string is 4 inches long. If you put the strings together, how long will it be?	It's lunch time. There are 12 students sitting at the green table and 21 students at the purple table. How many students are there all together?
You are in the library. There are 13 books on the top shelf and 25 books on the bottom shelf. How many books all together?	Lily had 38 cookies to take to school. She gave away 13 cookies before she got to school. How many cookies did she have when she got to school?
There are 11 cats sitting on the step. 5 cats get up and walk away. How many cats are left sitting on the step?	Joe read 18 books. Robin read 11 books. How many books did they read together?
8 + 7 = 15	9 + 12 = 21
4 + 3 = 7	37 – 12 = 25
18 – 6 = 12	57 – 34 =



Component	Math
Grade Level:	First Grade
Lesson Title:	In and Out Puzzles #1
Focus:	Operations

Materials:

White boards Crayolas Socks (for erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Focus Student's Prior Knowledge

What is a pattern? When we work with "in and out' activities we are really working with a pattern. If the rule is +3, (that's the in) what will the out be if you start with 6, 7, 8, or 9. (9, 10, 11, 12). What about if you apply the rule to these numbers: 2, 4, 6, 8? (5, 7, 9, 11). What are other patterns that you have seen?

Content (the "Meat")	
Problem of the Day John has 8 red marbles. Fred has 9 blue marbles. Lori has 6 purple marbles. How many marbles are there in all?	*Activity → Teachable Moment(s) <i>throughout</i>
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways. $1 + 2 = 3$ $2 + 1 = 3$ $3 - 2 = 1$ $3 - 1 = 2$ After they have written the problem in all 4 ways they will find a partner and say,"If $1 + 2 = 3$, then $2 + 1 = 3$ ".The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ".You should have them practice this conversation (exactly as it is written) with 3-5 otherstudents every day. On the 5 th day, you will utilize all 4 problems from the days before, andthe conversation will follow the pattern, but the second responder will need to quickly lookthrough his/her cards (of course we hope they remember without looking) and gives thecorrect response.Today you will introduce this activity and begin with the Fact Family of 3. 9, and 12.	During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
Have students write the entire Fact Family on the white board.	





3 + 9 9 + 3 12 – 12 – Bring two s Try it again Then have Remember	9 = 12 3 = 12 3 = 9 9 = 3 tudents up with several children find that today	to practice al other pa d a partne they are o	the conve irs of stude r and pract nly doing th	rsation. ents. ice the cor ne Fact Fa	າversation. mily of 3, 9	Do this at lea , and 12.	ast 4 times.	
			Math \	/ocabular	у			It is important to review
Concept fo	or Today: i	in and out	t nd out" rofo	ra ta tha n	attarn that	opplice e rule	to a parias of	often throughout the day.
numbers.	n: The con The "in" refe	ers to the r	ule that you	rs to the p J will apply	/ to each of	the numbers	listed. The	Complete the Vocabulary
"out" refers	to the ansv	ver or the	end result.	Try this "i	n" + 2.			notebook for each word.
	In	3	1	5]			students experience the word
	Out	5	- -	5				(Ex. 4 students creating a
			1	I	1			acting out an equation).
Have childr	ren review t	he Vocabı	ulary notebo	ook for the	concept of	"in and out".		Vocabulary Notebooks can
Vocabular	y Notebool	k Sample:						composition book.
New Wor	d	·		My Des	scription			
	in an	nd out		In	2	4	5	
				Out	5	4	5	
Personal	Connectio	n		Drawin	ıg		<u> </u>	
Can yo	Can you apply the in and out pattern? in							
			Α	ctivity				Focus on having young
			Ор	erations				people "compete" in pairs or small groups. Once a game
In and Out	Puzzles							is mastered you can utilize it
We can find patterns in numbers. For example, if a "rule" is to add 2, there is a pattern to					a pattern to	in the "When Homework Is Complete" center		
how numbe	how numbers will progress. For example if the rule is to add 2, look at the number in and determine the number out:					imber out:		
$\ln 3 4 5$								
Out 6								
it the rule was add 2 and you only had the "out number", you would have to subtract the 2 so you could find the number you started with.								
In	3		_]				
Out	5	6	7					
Work through	gh several (s will be rea	examples adv to wor	of "in" and ' k on the ac	"out" puzzl tivity alone	es. When	students are	comfortable	



In and Out

Directions:

- 1. Divide students into pairs.
- 2. Give each pair an In and Out card and a white board or paper.
- 3. Working together, pair completes each of the In and Out puzzles.
- 4. When pair is finished, they should join another pair and compare the work that they did.

	Closing
	Review
Say:	
•	Please recap what we did today.
•	Did we achieve our objectives?
	Debrief
What d	id you like about what we did today in math?
lf vou p	out 6 in and you already have 2. what will come out?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade In and Out Puzzles

Rule:	+ 10		Rule:	-8		
	In	Out		In	Out	
		35		25		
	50				10	
	60			95		
Rule:	+20		Rule:	-10		
	In	Out		In	Out	
	24			19		
		30		59		
	60				29	
Rule:	-15		Rule:	+25		
	In	Out		In	Out	
	19			50		
		35		25		
	58				78	
Rule:	- 25		Rule:	+20	· · · · · · · · · · · · · · · · · · ·	
	In	Out		In	Out	
	25			20		
		50		30		
	50				90	
Rule:	+5		Rule:	+12	1 1	
	In	Out		In	Out	
	23			14		
		35		36		
		58			36	
	L					


Rule: +7			Rule: <u>-4</u>
	In	Out	In Out
	14		
		42	20
		56	
			-
Rule:	-12		Rule: +8
	In	Out	
	48		
		60	
		12	
	_		
Rule:	+/		Rule: -3
	In	Out	In Out
	15		
		42	37
	29		
	4.4		
Rule: + 11			
	In	Out	
	13		
	42		
		91	
- Dulo:	±15		Pule: 6
	In	Out	
	10		
		35	
	40		



Component	Math
Grade Level:	First Grade
Lesson Title:	In and Out #2
Focus:	Operations

Materials:

White boards Crayolas Socks (use as erasers) Activity at the end of the lesson plan

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

What is a pattern? When we work with "in and out' activities we are really working with a pattern. If the rule is +3, (that's the in) what will the out be if you start with 6, 7, 8, or 9. (9, 10, 11, 12). What about if you apply the rule to these numbers: 2, 4, 6, 8? (5, 7, 9, 11). What are other patterns that you have seen?

Content (the "Meat")	
Problem of the Day There are 17 boys and 11 girls in Mrs. Jones' class. How many students are in the class all together? How many more boys than girls?	*Activity → Teachable Moment(s) <i>throughout</i> During the lesson check in
Fact PracticeFact Practice for 1st grade is looking at number families, so you are looking at both additionand subtraction. The key is for children to learn that numbers have a relationship with oneanother in adding and subtracting. Fact practice will follow this pattern every day.Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)They will write the problem in four ways.1 + 2 = 32 + 1 = 33 - 2 = 13 - 2 = 13 - 1 = 2After they have written the problem in all 4 ways they will find a partner and say,"If 1 + 2 = 3, then 2 + 1 = 3".The other student will respond with "Yes, and since that is true, 3 - 1 = 2, and 3 - 2 = 1".You should have them practice this conversation (exactly as it is written) with 3-5 otherstudents every day. On the 5 th day, you will utilize all 4 problems from the days before, andthe conversation will follow the pattern, but the second responder will need to quickly lookthrough his/her cards (of course we hope they remember without looking) and gives thecorrect response.Today you will introduce this activity and begin with the Fact Family of 8, 11, and 19.Have students write the entire Fact Family on the white board.	 with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.



8 + 1	11 = 19							
11 +	· 8 = 19							
19 -	8 = 11							
19 – 11 = 8								
Bring two s	students up	to practice	the conv	ersation.				
Try it agair	with severa	al other pa	irs of stud	ents.				
Then have	children fin	d a partne	r and prac	tice the co	nversation.	Do this at lea	ast 4 times.	
Remember	r that today	they are o	nly doing	the Fact Fa	amily of 8, 11	, 19.		
Math Vocabulary Concept for Today: in and out Description: The concept "in and out" refers to the pattern that applies a rule to a series of numbers. The "in" refers to the rule that you will apply to each of the numbers listed. The						It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word		
out refers	to the ansv	wer or the	end result	. Try this "	in" + 2.			When possible have
		2	4	F	1			students experience the word
	in	3	4	5	_			(Ex. 4 students creating a
	Out	5						right angle, multiple students
Have child	ren review t	he Vocabu	larv note	book for the	e concept of '	in and out".		Vocabulary Notebooks can
			,		I			be made from 1/2 of a
Vocabular	y Notebool	k Sample:						composition book.
New Wor	ď			My De	scription			
	in an	nd out		In	3	4	5	
				Out	5			
Personal	Connectio	n		Drawi	ng			
					\bigcirc			
Can yo	u apply the	in and out	pattern?			in		
				Activity				Focus on having young
			0	perations				people "compete" in pairs or
								small groups. Once a game
In and Out	t Puzzles							is mastered you can utilize it
We can fin	d patterns ir	n numbers	. For exa	mple. if a "i	rule" is to add	2. there is	a pattern to	in the "When Homework Is
how numbe	ers will prog	ress.		1 /		,		Complete" center.
For example if the rule is to add 2, look at the number in and determine the number out.						imber out:		
In 3 4 5								
Out 6								
If the rule was add 2 and you only had the "out number", you would have to subtract the 2								
so you could find the number you started with.								
In 3								
Out 5 6 7								
Work through several examples of "in" and "out" puzzles. When students are comfortable								
the students will be ready to work on the activity alone.								



In and Out Directions:

- 1. Divide students into pairs.
- 2. Give each pair an In and Out card and a white board or paper.
- 3. Working together, pair completes each of the In and Out puzzles.
- 4. When pair is finished, they should join another pair and compare the work that they did.

	Closing		
	Review		
Say:			
Please recap what we did today.			
 Did we achieve our objectives? 			
	Debrief		
What did you like about what we did today in math?			
What do you know about a calendar?			
What are the names of the month?			
What are the names of the days of the week?			

Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade In and Out Puzzles

Rule:	+ 10		Rule: <u>-8</u>
	In	Out	In Out
		35	25
	50		10
	60		95
Rule:	+20		Rule: <u>-10</u>
	In	Out	In Out
	24		19
		30	59
	60		29
		1	
Rule:	-15		Rule: <u>+25</u>
	In	Out	In Out
	19		50
		35	25
	58		78
Rule: - 25			Rule: +20
	In	Out	In Out
	25		20
		50	30
	50		90
Rule: +5			Rule: +12
	In	Out	In Out
	23		
		35	
		58	
	L	- 1	



Rule: +7			Rule: _4
	In	Out	In Out
	14		12
		42	20
		56	14
Rule:	-12		Rule: +8
	In	Out	In Out
	48		20
		60	48
		12	16
		1	
Rule:	+7		Rule: <u>-3</u>
	In	Out	In Out
	15		17
		42	37
	29		70
Rule: + 11			Rule: _4
	In	Out	In Out
	13		12
	42		36
		91	87
Rule: +15			Rule: - 6
	In	Out	In Out
	10		20
		35	68
	40		81
		1	



Component	Math
Grade Level:	First Grade
Lesson Title:	Student Activity Choice
Focus:	Review

Materials:

White boards Crayolas Socks (use for erasers) Materials for games played the past 10 days

Opening

State the objective

Today we are going to learn some math vocabulary—words that we need to use when we talk about addition and subtraction. We are also going to practice some of the math skills that we will need to be excellent at math.

Gain prior knowledge by asking students the following questions

Ask children what they know about addition and subtraction. Ask them to share what they do to write number sentences? Ask them about story problems and how they connect to number sentences?

Content (the "Meat")				
Problem of the Day You want to go to your grandma's house. She lives 5 miles away. Would it be faster to ride your bike are walk? Explain your thinking.	*Activity → Teachable Moment(s) <i>throughout</i>			
Four want to go to your grandma's house. Sine lives 5 miles away. Would it be faster to note your bike are walk? Explain your thinking. Fact Practice Fact Practice for 1 st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways. 1 + 2 = 3 2 + 1 = 3 3 - 2 = 1 3 - 1 = 2 After they have written the problem in all 4 ways they will find a partner and say, "If $1 + 2 = 3$, then $2 + 1 = 3$ ". The other student will respond with "Yes, and since that is true, $3 - 1 = 2$, and $3 - 2 = 1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5 th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response. Today you will introduce this activity and begin with the Fact Family of 2, 9 and 11.	Noment(s) throughout During the lesson check in with students repeatedly. Check in about what is happening and what they are thinking. Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to determine what the rest of the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.			
2 + 9 = 11				



9 + 2 = 11 11 - 2 = 0 11- 9 = 2	
Bring two students up to practice the conversation. Try it again with several other pairs of students. Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 9, and 11.	
Activity Today is a review lesson. Students should choose from the following activities: Name Those Coins How Many Pieces?	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is
Gummy Bears Lucky Charms Word Problems	Complete" center.

	Closing
	Review
Say:	
Please recap what we did today.	
 Did we achieve our objectives? 	
	Debrief
Which of the games did you enjoy playing the most?	
What about this game is fun for you?	

Reflection (Confirm, Tweak, Aha!)

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.