

Component	Math
Grade Level:	2 nd Grade
Lesson Title:	How Many?
Focus:	Multiplication

Materials:			
White boards	Vocabulary Notebooks	Activity at end of lesson plan	
Crayolas	decks of cards		
Socks	dice		

Opening

State the objective

Today we are going to practice using our math vocabulary and math skills in multiplication.

Gain prior knowledge by asking students the following questions

What do you know about multiplication? What is skip counting? Count to 100 by 5s. This is a form of multiplication. Count to 100 by 10s. This is a form of multiplication. Count to 50 by 2s. This is a form of multiplication. Multiplying is counting by numbers other than 1. Count by 3s to 30. (Use the hundreds chart if you need it).

Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>	
Julie buys a cupcake for \$.55. If she gives the clerk a dollar, how much change will she be given? How do you know?	During the lesson check in with students repeatedly.	
Fact Practice Addition War	Check in about what is happening and what they are thinking.	
 Divide students into pairs. Give each pair a deck of cards without face cards and jokers. 	Take advantage of any teachable moments.	
 Shuffle the deck and divide the cards evenly between the two players On go, the players turn over the cards at the same time Students add the 2 numbers that have been turned up First person to give the answer either wins the cards because the answer is correct, or has to turn over 2 cards because he/she gave the wrong answer At the end of round, students may reshuffle the pile of cards that they have Play can continue until one player has all cards or time has called 	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.	



Math Vo Word for Today: multiplication Description: The term multiplication refers to Multiplication is an easier way to find a total th sized groups. Multiplication only works when groups. VVV VVV VVV The 12. Enter the term multiplication in the Vocabular peer. Vocabulary Notebook Sample: New Word	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.	
multiplication	4 x 3 = 12	
Personal Connection I know my multiplication tables.	Drawing	
 Multiplication Understanding that multiplication is skip count multiply. For instance, when you count by 10 90, and 100, it is like multiplying 1 x 10, 2 x 10 when you count by 5s. 5, 10, 15, 20, 25, 30 is 5. In second grade you also know how to cour makes it easier for you to begin to predict what Practice several types of skip counting with the marking multiples of different numbers in different numbers in different children are comfortable doing this they How Many? Directions: Divide students into pairs. Give each pair a set of How Many catally the should create a chart that will indicate the arrival set. 	s and you say 10,20, 30, 40, 50, 60, 70, 80, 0, 3 x 10, 4 x 10 and so on. The same is true s like saying 1 x 5, 2 x 5, 3 x 5, 4, x 5, and 6 x unt by 2s. It is understanding this process that at numbers will come next in the pattern. he students, using a Hundreds Chart and erent colors. are ready to participate in the activity. rds and a white board or paper. he How Many cards and answers the d draw a picture of the question and then hswer. ents would draw one cat and count the paws. ure is of three cats, or if they need to they can	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" player getting ready to play this game so he/she could get all the blocks are completed. 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.



2nd Grade How Many?

How many ears on 5 dogs?	How many legs on 4 pigs?
dogs 1	pigs 1
ears 2	legs 4
How many sides on 4 triangles?	How many fingers on 4 hands?
triangles 1	hands 1
sides 3	fingers 5
How many eyes do three boys have?	How many apples in 5 bags?
boys 1	bags 1
eyes 2	apples 5
How many socks in 5 pairs?	How many noses on 4 people?
pairs 1	people 1
socks 2	noses 1
How many legs on 5 boys?	How many shoes in 4 pairs?
boys 1	pairs 1
legs 2	shoes 2



How many sides on 4 squares?	How many sides on 4 hexagons?
squares 1	hexagons 1
sides 4	sides 6
How many arms on 3 girls?	How many knees on 4 giraffes?
girls 1	giraffes 1
arms 2	knees 4
How many sides on 4 dice?	How many names for 5 people?
, ,	5 1 1
dice 1	people 1
sides 6	names 3
How many feet on 4 cows?	How many ears on 4 tigers?
now many leet on 4 cows?	now many ears on 4 ligers?
cows 1	tigers 1
feet 4	ears 2



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	How Many?
Focus:	Multiplication

Materials:			
White boards	Vocabulary Notebooks	Decks of cards	
Crayolas	Dice		
Socks	Activity at the end of the lesson plan		

Opening

State the objective

Today we are going to practice using our math vocabulary and math skills in understanding multiplication.

Gain prior knowledge by asking students the following questions

What do you know about multiplication? What is skip counting? Count to 100 by 5s. This is a form of multiplication. Count to 100 by 10s. This is a form of multiplication. Count to 50 by 2s. This is a form of multiplication. Multiplying is counting by numbers other than 1. Count by 3s to 30. (Use the hundreds chart if you need it).

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Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>	
If a \mathcal{K} = 7 and \mathcal{K} - \mathcal{A} = 16, what is the value of \mathcal{A} ? Fact Practice	During the lesson check in with students repeatedly.	
Fact Practice Spokes on a Wheel 1. Divide students into pairs 2. On a white board, student draws a small circle with 9 spokes coming out of it (should look	Check in about what they are thinking. Take advantage of any	
like a bicycle tire) 3. Have students choose to put a 6, 7 or 8 in the center circle	teachable moments.	
 Students choose to put a 0, 7 of 8 in the center circle Student rolls two dice and adds the pips (dots) Taking this total, student writes a math problem on one of the spokes (eg. 7 is in the circle and students rolls a 3 and 5 which totals 8. The spoke equation would look like 7 + 8 = 15 Process continues until all spokes have an equation 	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.	
Math Vocabulary	It is important to review	
Word for Today: multiplication Description: The term multiplication refers to repeated addition or skip counting.	academic math vocabulary often throughout the day.	



Multiplication is an easier way to find a total than addition, PROVIDING that you have equal sized groups. Multiplication only works when you have the same amount in multiple groups. *** *** *** *** The hearts should 4 groups of 3 hearts, or 4 x 3 = 12. Enter the term multiplication in the Vocabulary Notebook. Share the information with a peer. Vocabulary Notebook Sample:		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
New Word	My Description	be made from ½ of a
multiplication	4 x 3 = 12	composition book.
Personal Connection	Drawing	
I know my multiplication tables.	$\bigtriangleup \bigtriangleup \bigtriangleup$	
Activity Multiplication		Focus on having young people "compete" in pairs or small groups. Once a game
MultiplicationUnderstanding that multiplication is skip counting is a great start on learning how to multiply. For instance, when you count by 10s and you say 10,20, 30, 40, 50, 60, 70, 80, 20, and 100, it is like multiplying 1 x 10, 2 x 10, 3 x 10, 4 x 10 and so on. The same is true when you count by 5s. 5, 10, 15, 20, 25, 30 is like saying 1 x 5, 2 x 5, 3 x 5, 4, x 5, and 6 x 5. In second grade you also know how to count by 2s. It is understanding this process that makes it easier for you to begin to predict what numbers will come next in the pattern. Practice several types of skip counting with the students, using a Hundreds Chart and marking multiples of different numbers in different colors. Once children are comfortable doing this they are ready to participate in the activity.is mastered you can utilize it in the "When Homework Is Complete" center.		
How Many? Directions: 1. Divide students into pairs. 2. Give each pair a set of How Many car 3. Working together, pair reads one of the question. To answer, students should create a chart that will indicate the anse Example: How many paws on 3 cats? Stude They would then count the paws as if the picture draw 3 cats and count the paws. Then they we cats 1 2 3 3 4 8 12	te How Many cards and answers the d draw a picture of the question and then swer. Ints would draw one cat and count the paws. Inte is of three cats, or if they need to they can	



	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 t	this same thing in the "real world"?
What advice would you give to a "new" stu	udent getting ready to do this activity?
Deflection (Confirm Turcel: Abol)	
Reflection (Confirm, Tweak, Aha!)	
1. Ask students to think about what they did to	iday 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:	2 nd Grade
Lesson Title:	What's My Shape?
Focus:	Geometry

Materials:		
White boards	Vocabulary Notebooks	
Crayolas	Socks (erasers for white board)	
Cards	Activity at the end of the lesson plan	

Opening

State the objective

Today we are going to practice using our math vocabulary and math skills and work with geometry.

Gain prior knowledge by asking students the following questions

What do you know about geometry? What are some examples of the shapes that can be identified by plane geometry? What are some examples of the shapes that can be identified as solid geometry? What are some of the most common shapes? Where can you see them in the school?

Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>	
Look at the shape below. If you want to divide this shape into two congruent triangles, what will you do? How will you know that you are correct?	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 Practice	Stop the class and focus on a	
Fore-header	student's key learning or	
 Divide students into trios. Give each trio a deck of cards without face cards and jokers. Shuffle the deck and give all of the cards to the referee who will be "judging" the contest On go, players are each handed a card by the referee and WITHOUT looking, put the card face out on his/her forehead 	understanding. Ask open- ended questions to determine what the rest of the group is thinking.	
4. The referee adds the two numbers together and states the answer	When possible, engage	
5. Each player looks at the other person's exposed number and names his/her own number	students in a "teach to learn"	
6. Person who wins (accuracy and time), collects both cards	opportunity and have the student become the teacher.	
7. Play continues until all cards are gone.		
 Players can repeat play (if there is another time) with each other so each has an opportunity to be both a player and referee 		



Math Vocabulary Word for Today: geometry Description: The term geometry identifies one of the common areas of mathematics, shapes, planes, lines, and space. Geometry helps us to have a perception of the world that allows us to see patterns, shapes, and how things can go forward on and on, in the case of a line, endlessly. There are two types of geometry, plane and solid. Plane is about two-dimensional shapes, lines and space. Solid geometry is about 3-dimensional shapes like cylinders, cubes, and pyramids. Create an entry for the term "geometry" in your Vocabulary Notebook. Share with a peer. Vocabulary Notebook Sample: New Word My Description geometry shapes, space and lines		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
goomory		
Personal Connection	Drawing	
Our yard is in the shape of a triangle.	\bigcirc \square \triangle	
Activity Geometry Geometry is the part of math that addresses lines, shapes, and space. Plane geometry is about flat shapes like lines, circles, and triangles? What other flat shapes can you think of? Solid geometry is about solid, 3-dimensional shapes like spheres (this is like a basketball or globe) and cubes (like a box or an ice cube). One of the things to think about is how different shapes can be put together to make other shapes. Today we are going to be working with plane geometric shapes and deciding what shapes can be put together to make other shapes. Today you will be working with some cards and also with some Tangrams. What's My Shape Directions: 1. Divide students into pairs. 2. Give each pair a set of What's My Shape cards. 3. Working together, students will determine which target shape can be made with the identified shapes. 4. When pairs have completed this challenge, they should work with the Tangrams to make a robot or other picture. 5. To capture the picture, they should trace each one of the shapes, and then color the shape.		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.

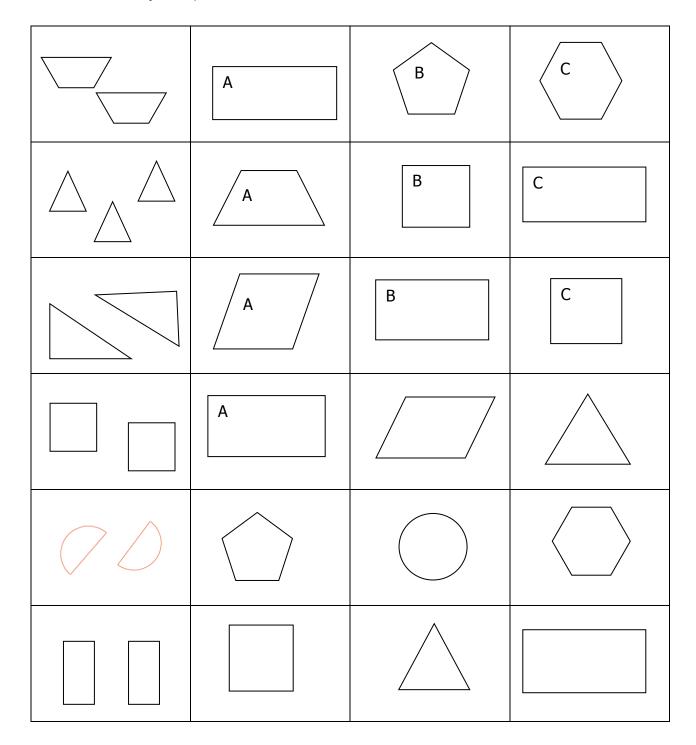


Closing Review Say: • Please recap what we did today. • Did we achieve our objectives? Debrief Three Whats Ask the following three what questions: What was your key learning for the day? What opportunities might you have to do this same thing in the "real world"? What advice would you give to a "new" student getting ready to do this activity? 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.



2nd Grade What's My Shape





Component	Math	
Grade Level:	2 nd Grade	
Lesson Title:	What's My Shape?	
Focus:	Geometry	

Materials:		
White boards	Vocabulary Notebooks	Activity at the end of the lesson plan
Crayolas	Decks of cards	
Dice	Socks (use as erasers)	

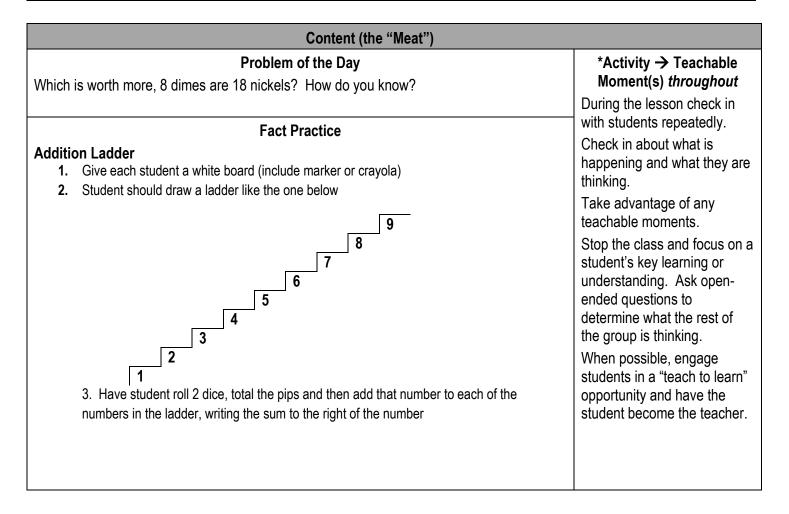
Opening

State the objective

Today we are going to practice using our math vocabulary and math skills in geometry.

Gain prior knowledge by asking students the following questions

What do you know about geometry? What are some examples of the shapes that can be identified by plane geometry? What are some examples of the shapes that can be identified as solid geometry? What are some of the most common shapes? Where can you see them in the school?





Math Vocabulary		It is important to review
Word for Today: geometry	academic math vocabulary	
Description: The term geometry identifies one of the common areas of mathematics, shapes, planes, lines, and space. Geometry helps us to have a perception of the world that allows us to see patterns, shapes, and how things can go forward on and on, in the case of a line, endlessly. There are two types of geometry, plane and solid. Plane is about two-dimensional shapes, lines and space. Solid geometry is about 3-dimensional shapes like cylinders, cubes, and pyramids. Create an entry for the term "geometry" in your Vocabulary Notebook. Share with a peer.		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: New Word	My Description	Vocabulary Notebooks can
geometry	shapes, space and lines	be made from ½ of a composition book.
Personal Connection	Drawing	
Our yard is in the shape of a triangle.	$\bigcirc \Box \bigtriangleup$	
Act	ivity	Focus on having young
Activity Geometry Geometry Geometry is the part of math that addresses lines, shapes, and space. Plane geometry is about flat shapes like lines, circles, and triangles? What other flat shapes can you think of? Solid geometry is about solid, 3-dimensional shapes like spheres (this is like a basketball or globe) and cubes (like a box or an ice cube). One of the things to think about is how different shapes can be put together to make other shapes. Today we are going to be working with plane geometric shapes and deciding what shapes can be put together to make other shapes. Today you will be working with some cards and also with some Tangrams. What's My Shape Directions: 1. Divide students into pairs. 2. Give each pair a set of What's My Shape cards. 3. Working together, students will determine which target shape can be made with the identified shapes. 4. When pairs have completed this challenge, they should work with the Tangrams to make a robot or other picture. 5. To capture the picture, they should trace each one of the shapes, and then color		people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

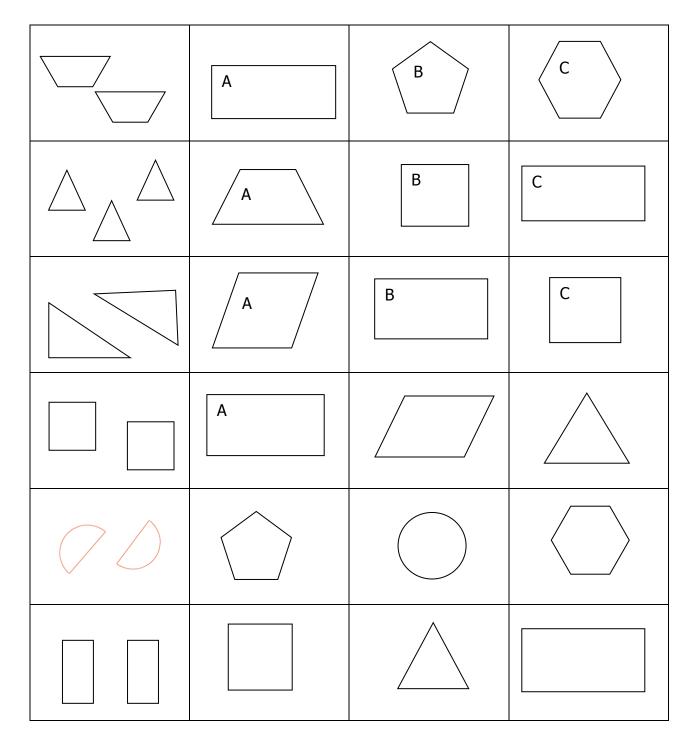


	Closing
	Review
Say:	
•	Please recap what we did today.
•	Did we achieve our objectives?
	Debrief
Three	Whats
Ask the	e following three what questions:
	What was your key learning for the day?
	What opportunities might you have to do this same thing in the "real world"?
	What advice would you give to a "new" student getting ready to do this activity.
Reflect	tion (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)
2	Ask them to comment on what they did today that was like something they had done before except in one

- 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.



2nd Grade What's My Shape





Component	Math	
Grade Level:	2 nd Grade	
Lesson Title:	Name That Fraction	
Focus:	Fractions	

Materials:

White boardsVocabulary NotebooksCrayolasPlaying cardsActivity at the end of the lesson planSocks (use as erasers)

Opening

State the objective

Today we are going to practice using our math vocabulary and math skills in learning about fractions.

Gain prior knowledge by asking students the following questions

What do you know about fractions? How are fractions written? What do you call the top number? What does it do? What is the bottom number called? What does it do? What are some common ways you might use fractions? Is a fraction representative of more than or less than a whole?

Content (the "Meat")		
	Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>
	the number sentences below. Which one expresses this story? Joe has 137 baseball He gives 41 of them to his best friend Martin. How many does Joe have left?	During the lesson check in with students repeatedly.
	137 + 41 = 137 – 41 =	Check in about what is happening and what they are
Target	Fact Practice	thinking. Take advantage of any teachable moments.
1. 2. 3. 4. 5. 6. 7.	Divide students into trios Each trio needs a deck of cards without face cards and jokers Place the cards face up in a TicTac Toe Grid Turn up a 10 th card which will be to the side and becomes the target number (aces count as 1) Each player makes an equation with some or all of the numbers in the grid to equal the target number. Students may add or subtract. Each card may be used only one time in the equation As the cards are being picked up, the player must say the equation aloud—for example if the target card is 10, then I could say 6 + 4 = 10, and pick up the 6 and the 4. After one player finishes his/her turn, then the cards taken are replaced by cards from 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.
9.	remaining deck Player with the cards at the end of the game win	
Word f	Math Vocabulary or Today: fractions	It is important to review academic math vocabulary



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Description: A fraction is a way of showing less that a whole thing. We have all had ½ of something. ½ is a fraction. There are two numbers in the fraction, the top number, the numerator which identifies the number of pieces that you have. The bottom number, the denominator, tell you how many pieces you would have if you had all of them. In the fraction ½, you have 1 of the 2 pieces. Think about the fraction ¼. This fraction tells you that you have 1 of 4 pieces. If you think about a cookie, it would be better to have 1 of 2 pieces rather than 1 of four. Students should complete the Vocabulary Notebook for the word fraction. 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
New Word	My Description	be made from 1/2 of a
fraction	a numerator and a denominator that indicates part of a whole	composition book
Personal Connection	Drawing	
I am going to eat ½ of the cookie.	fraction	
Activity Fractions Fractions A fraction represents part of a whole. There are two numbers in a fraction—the top number is the numerator and the bottom number is the denominator. The denominator tells you how many pieces altogether in the whole item and the numerator tells you how many parts you actually have. 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.
In this graphic, the whole rectangle has been denominator—the five pieces that there are. the numerator. This fraction would look like	There are 2 pieces that are shaded, the two is this: $\frac{2}{2}$	
5 Practice several of these drawing with the children. When you are comfortable that they understand how to write a fraction to represent what is shown, have them work in pairs to identify the fractions.		
 Name That Fraction <u>Directions:</u> Divide students into pairs. Five each pair a set of Name That Fraction Cards. Working together pair should turn over each of the cards and identify and write the fraction on the white board. 		





4. When students have finished all of the cards they should share information with another pair.

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"?

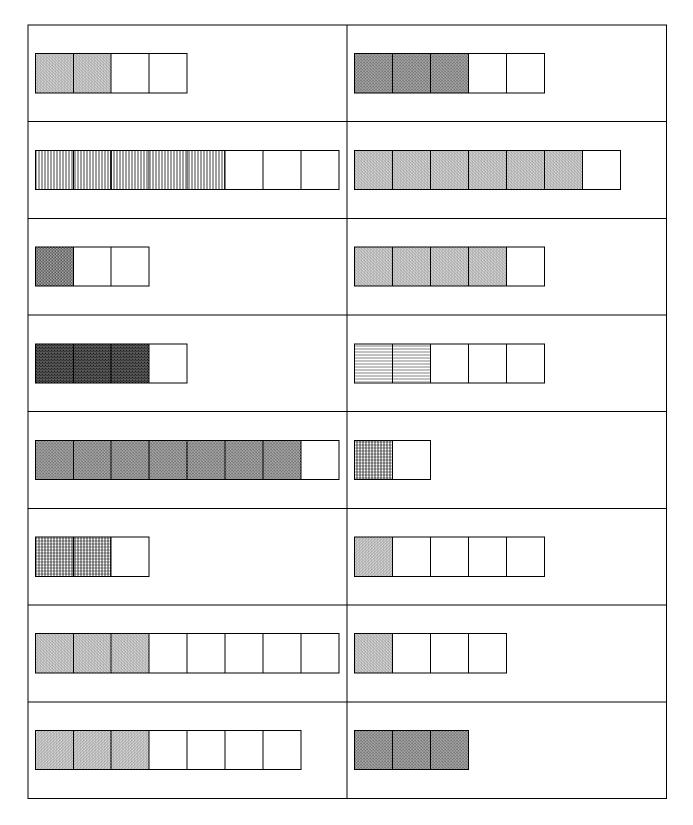
What advice would you give to a "new" student getting ready to do this activity?

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.



2nd Grade Name That Fraction





Component	Math	
Grade Level:	2 nd Grade	
Lesson Title:	Name That Fraction	
Focus:	Fractions	

Materials:			
White boards	Vocabulary Notebooks	S	Number Hunt Game Board
Crayolas	12 sided dice (1 for ea	ach child)	
Activity at the end of the lesso	on plan So	ock (for erasers)	

Opening

State the objective

Today we are going to practice using our math vocabulary and math skills in learning about fractions.

Gain prior knowledge by asking students the following questions

What do you know about fractions? How are fractions written? What do you call the top number? What does it do? What is the bottom number called? What does it do? What are some common ways you might use fractions? Is a fraction representative of more than or less than a whole?

Content (the "Meat")	
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>
If Ryan's backpack is 17 inches long, and he says that this is 1 foot + 4 inches, is he correct? How do you know? Fact Practice Number Hunt 1. Divide students into pairs 2. Each pair needs a Number Hunt sheet (attached to this lesson plans) 3. Player rolls two, 12-sided dice. 4. Player adds or subtracts the two numbers. 5. If the number is not yet covered, then player may cover the number. 6. Next player repeats steps 1-3. 7. Winner is determined by who has the most numbers covered.	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.
Math Vocabulary	It is important to review
Word for Today: fractions	academic math vocabulary
Description: A fraction is a way of showing less that a whole thing. We have all had $\frac{1}{2}$ of	often throughout the day.



something. $\frac{1}{2}$ is a fraction. There are two numbers in the fraction, the top number, the Complete the Vocabulary numerator which identifies the number of pieces that you have. The bottom number, the notebook for each word. denominator, tell you how many pieces you would have if you had all of them. In the fraction When possible, have $\frac{1}{2}$, you have 1 of the 2 pieces. Think about the fraction $\frac{1}{4}$. This fraction tells you that you students experience the word have 1 of 4 pieces. If you think about a cookie, it would be better to have 1 of 2 pieces rather (Ex. 4 students creating a than 1 of four. right angle, multiple students Students should complete the Vocabulary Notebook for the word fraction. acting out an equation). Vocabulary Notebooks can Vocabulary Notebook Sample: be made from $\frac{1}{2}$ of a New Word **My Description** composition book. fraction a numerator and a denominator that indicates part of a whole Personal Connection Drawing fraction I am going to eat $\frac{1}{2}$ of the cookie. Activity Focus on having young people "compete" in pairs or Fractions small groups. Once a game is mastered you can utilize it Fractions in the "When Homework Is A fraction represents part of a whole. There are two numbers in a fraction—the top number is Complete" center. the numerator and the bottom number is the denominator. The denominator tells you how many pieces altogether in the whole item and the numerator tells you how many parts you actually have. For example: In this graphic, the whole rectangle has been cut into 5 pieces. Five would be the denominator-the five pieces that there are. There are 2 pieces that are shaded, the two is the numerator. This fraction would look like this: 2 5 Practice several of these drawing with the children. When you are comfortable that they understand how to write a fraction to represent what is shown, have them work in pairs to identify the fractions. Name That Fraction Directions: 1. Divide students into pairs. 2. Five each pair a set of Name That Fraction Cards. 3. Working together pair should turn over each of the cards and identify and write the fraction on the white board.



4. When students have finished all of the cards they should share information with another pair.

		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?

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.



Number Hunt

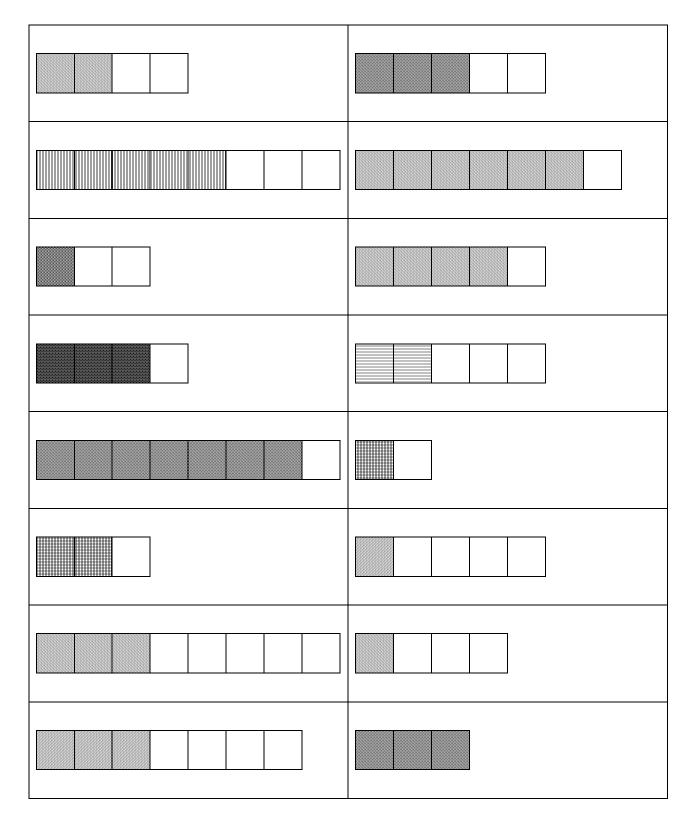
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Number Hunt

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



2nd Grade Name That Fraction





Component	Math
Grade Level:	2 nd Grade
Lesson Title:	What Time?
Focus:	Measurement

Materials:		
White boards	Vocabulary Notebooks	Pencils
Crayolas	Decks of cards	Activity at end of lesson plan
Game tokens	Socks (use as erasers)	

Opening

State the objective

Today we are going to practice using our math vocabulary and math skills in telling time.

Gain prior knowledge by asking students the following questions

What do you know about telling time? What are some of the tools that we use to tell time? What is the difference between a clock and a calendar? What is the one of the smaller common units of time? When you are comparing time, it is important that you start with the larger unit and convert it to the smaller unit. Which is smaller, days or hours?

	Content (the "Meat")			
	Problem of the Day nuch money will Jorge need to buy a yoyo for \$.67 and a boat for \$.43? How do you	*Activity → Teachable Moment(s) <i>throughout</i>		
<u>now y</u> 1. 2. 3.	Fact Practice Draw! Divide students into pairs and give each pair a deck of cards Remove the face cards and jokers from the deck of cards. Shuffle the deck.	During the lesson check in with students repeatedly. Check in about what is happening and what they ar thinking. Take advantage of any		
4. 5. 6. 7. 8.	Decide who will go first. First player draws two cards. Student adds or subtracts the cards. Student writes his/her problem on the white board, writing a complete number sentence. Students take turns drawing cards and creating problems.	teachable moments. Stop the class and focus on 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		
)escri	Math Vocabulary for Today: time iption: Time is an ongoing sequence of events that are taking place (present), did take past), or will take place (future). We measure time in seconds, minutes, hours, days,	It is important to review academic math vocabulary often throughout the day Complete the Vocabulary		



weeks, months and years. We use both analog use watches and other digital devices. Compa measures, days and weeks, seconds and minu Students should complete the Vocabulary Note Vocabulary Notebook Sample:	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	
time	seconds, minutes, hours, days, weeks, months, and years	be made from ½ of a composition book.	
Personal Connection	Drawing		
I use my watch to tell time.	Value		
Tin Units of Time We tell time in a variety of ways. We use clock We use calendars to tell us about days, week, a decades. Today we are going to look at both analog (rou understanding about what is longer, shorter, an Review clocks with children. Discuss how to we the hands on an analog clock.	and months. We also tell time in years and nd) and digital clocks, calendars, and check for d how many smaller units are in large units. rite time on a digital clock and how to draw in hour, how many hours in a day how many days r. etween two different times. Also review how to until a particular date. aloud about your thinking), then explain to 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 Complete" center.	
Directions:1. Divide students into pairs.2. Give each pair a deck of What Time ca3. Shuffle the cards and place between th4. Working together, they draw one of the			



	Closing
	Review
Say:	
•	Please recap what we did today.
•	Did we achieve our objectives?
	Debrief
Three	e Whats
Ask the	e 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?
Reflec	tion (Confirm, Tweak, Aha!)
	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.



2nd Grade What Time?

How many minutes in an hour?	How many hours in a day?	How many days are in most months?
How many weeks in a year?	What is longer, 20 hours or 1 day?	What is longer, 1 hear or 10 months?
What is shorter, 60 seconds or 1 minute?	What is shorter, 50 minutes or 1 hour?	Draw a clock face that shows 7:00.
Draw a clock face that shows 1:30.	Draw a clock face that shows 8:15.	Draw a clock face that shows 5:45.
Draw a clock to show:	Draw a clock to show: 4:30	Draw a clock to show: 11:15
Draw a clock to show: 4:45	How many hours between 2:00 a.m. and 5 a.m.?	How many hours between 7:00 a.m. and 11:00 a.m.?



How many hours	How many yours	How many hours
between 1:00 p.m. and	between 5:00 p.m. and	between 12:00p.m. and
8:00 p.m.?	10:00 p.m.?	1:00 p.m.?
How many hours	How many hours	How many hours
between 11:00 a.m. and	between 9:00 a.m. to	between6:00 a.m. and
4:00 p.m.?	12:00 p.m.?	3:00 p.m.?
What day comes after Tuesday?	What month comes before March?	What day comes after Friday?
What day comes before Saturday?	What month comes after November?	What day comes between Monday and Wednesday?



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	What Time?
Focus:	Measurement

Materials:		
White boards	Vocabulary Notebooks	
Crayolas	Cards without tens, face cards and jokers	
Activity at the end of this	e lesson plan Socks (use as erasers)	

Opening

State the objective

Today we are going to practice using our math vocabulary and math skills in learning about time.

Gain prior knowledge by asking students the following questions

What do you know about telling time? What are some of the tools that we use to tell time? What is the difference between a clock and a calendar? What is the one of the smaller common units of time? When you are comparing time, it is important that you start with the larger unit and convert it to the smaller unit. Which is smaller hours or minutes?

Content (the "Meat")	
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>
Show at least two different ways that you can make \$1.00 with coins.	During the lesson check in with students repeatedly.
Fact Practice Bump It Up! Add A Zero	Check in about what is happening and what they are thinking.
1. Divide students into pairs	Take advantage of any
2. Give each pair a white board and a deck of cards (without face cards, jokers, or 10s)	teachable moments.
3. The object of this fact practice is to sum numbers until you reach 1,000.	Stop the class and focus on
 Student draws 2 cards, adds the value of the cards together, multiplies by ten and writes the total on the sheet. 	student's key learning or understanding. Ask open-
5. It is not the other person's turn to do the same	ended questions to
6. When play returns to the first player, the process is repeated, although this time, the totals are added together.	determine what the rest of the group is thinking.
7. First person to 1,000 wins.	When possible, engage students in a "teach to learn"
 Example: Player draws a 7 and a 4. Total is 11. Multiply by 10 (add the zero) equals 110. Next turn, player draws a 3 and a 2 which totals 5. Multiply by 10 and I now add 50 to 110 for a total of 160. 	s opportunity and have the
Math Vocabulary	It is important to review
Vord for Today: time	academic math vocabulary



 Description: Time is an ongoing sequence of events that are taking place (present), did take place (past), or will take place (future). We measure time in seconds, minutes, hours, days, weeks, months and years. We use both analog and digital clock to measure time. We also use watches and other digital devices. Comparing time means to look at time from different measures, days and weeks, seconds and minutes, or other comparisons. Students should complete the Vocabulary Notebook for the concept of time. 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)	
New Word	My Description	Vocabulary Notebooks can	
time	seconds, minutes, hours, days, weeks, months, and years	be made from ½ of a composition book.	
Personal Connection	Drawing		
I use my watch to tell time.			
Units of Time	Activity Time	Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it	
We tell time in a variety of ways. We use cl	ock to tell us about seconds, minutes and hours. ek, and months. We also tell time in years and	in the "When Homework Is Complete" center.	
understanding about what is longer, shorter	round) and digital clocks, calendars, and check for , and how many smaller units are in large units. o write time on a digital clock and how to draw in		
Review with students how many minutes in in most months, and how many weeks in a	an hour, how many hours in a day how many days year.		
use the calendar to determine how many da	alk aloud about your thinking), then explain to the		
What Time? <u>Directions:</u> 1. Divide students into pairs. 2. Give each pair a deck of What Time 3. Shuffle the cards and place betwee 4. Working together, they draw one of			



5. When pair has worked through the cards, the pair should join another pair and compare the answers.

	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 da	ay?
What opportunities might you have to	do this same thing in the "real world"?
What advice would you give to a "new	v" student getting ready to do this activity.
What advice would you give to a new	v student getting ready to do this delivity.

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.



2nd Grade What Time?

How many minutes in an hour?	How many hours in a day?	How many days are in most months?
How many weeks in a year?	What is longer, 20 hours or 1 day?	What is longer, 1 hear or 10 months?
What is shorter, 60 seconds or 1 minute?	What is shorter, 50 minutes or 1 hour?	Draw a clock face that shows 7:00.
Draw a clock face that shows 1:30.	Draw a clock face that shows 8:15.	Draw a clock face that shows 5:45.
Draw a clock to show:	Draw a clock to show: 4:30	Draw a clock to show: 11:15
Draw a clock to show: 4:45	How many hours between 2:00 a.m. and 5 a.m.?	How many hours between 7:00 a.m. and 11:00 a.m.?

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How many hours	How many yours	How many hours
between 1:00 p.m. and	between 5:00 p.m. and	between 12:00p.m. and
8:00 p.m.?	10:00 p.m.?	1:00 p.m.?
How many hours	How many hours	How many hours
between 11:00 a.m. and	between 9:00 a.m. to	between6:00 a.m. and
4:00 p.m.?	12:00 p.m.?	3:00 p.m.?
What day comes after Tuesday?	What month comes before March?	What day comes after Friday?
What day comes before Saturday?	What month comes after November?	What day comes between Monday and Wednesday?



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Power of 10
Focus:	Operations

Materials:		
White boards	Vocabulary Notebooks	
Crayolas	cards (remove face card and jokers)	
Socks	Activity at the end of this lesson plan	

Opening

State the objective

Today we are going to practice using our math vocabulary and math skills to learn about the power of 10.

Gain prior knowledge by asking students the following questions

What happens if you multiply something by 10? Multiplying by ten is powerful. It can move a value forward. If we have 15 and we multiply by 10, we start with the 15 and add a zero so that we now have 150. If we begin with 20 and multiply by 10, we add a zero and have 200. What happens to 43 if you increase by the power of ten? What about 67? What about 82?

Content (the "Meat")	
Problem of the Day Sally has 12 cupcakes. She wants to put them into 6 equal groups. How many cupcakes will	*Activity → Teachable Moment(s) <i>throughout</i>
be in each group? Fact Practice Draw!	During the lesson check in with students repeatedly. Check in about what is happening and what they are
 Divide students into pairs and give each pair a deck of cards Remove the face cards and jokers from the deck of cards. Shuffle the deck. 	thinking. Take advantage of any teachable moments.
 Decide who will go first. First player draws two cards. Student adds or subtracts the cards. 	Stop the class and focus on a student's key learning or understanding. Ask open- ended questions to
 Student writes his/her problem on the white board, writing a complete number sentence. 	determine what the rest of the group is thinking.
8. Students take turns drawing cards and creating problems.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.
Math Vocabulary	It is important to review



Word for Today: ten		academic math vocabulary
Description: The numeral 10 is very interesting. When you multiply by ten you can get the		often throughout the day. Complete the Vocabulary
answer simply by adding a zero. If you multiply by 100 (which is really 10 by 10) you begin with the number and add 2 zeros. If you multiply by 1,000, you write the number and add		notebook for each word.
three zeros. So $9 \times 10 = 90$. $9 \times 100 = 900$.		When possible, have
	Notebook, making an entry for the word "ten".	students experience the word
Vocabulary Notebook Sample:		(Ex. 4 students creating a
New Word	My Description	right angle, multiple students acting out an equation).
ten	multiplying by ten adds a 0 to the number	Vocabulary Notebooks can be made from $\frac{1}{2}$ of a
Personal Connection	Drawing	composition book.
I can easily multiply by 10.	9, 90, 900, 9,000	
	Activity	Focus on having young
Pov	ver of Ten	people "compete" in pairs or small groups. Once a game
Power of Ten		is mastered you can utilize it
	ding how "powerful" saying "times ten" really is. If	in the "When Homework Is
we have 3 items x 10, we now have 30 item	s. If we start with 14 and we times ten we have	Complete" center.
140.	tion of the 0 to the number that we are working	
with.		
Practice several of these problems on the be "times ten" really does. When they are com how to draw a playing card (no face cards, ju "times ten" and write the total. For example Then draw a second card, repeat the process the example, if the second time I draw a 7 a have a total of 90. Demonstrate a third time	bard, engaging the children in thinking about what fortable working with these examples show them okers, or tens), write the number on the board, if you drew a 2 you would have a total of 20. as and add the total to the first total. To continue and times ten, I will add 70 to the 20 I have. I now Explain that they are going to be playing a game will be to reach 1,000 before the person they are	
board.4. Player 2 plays in the same way.5. On the second turn, Player 1 repeat first product.	e card by 10, and records the product on a white is the process, this time adding the product to the	
	ers reaches 1,000 exactly. If the sum of the ill have to take another turn, not adding in the last	



Modification: You can do the reverse by starting with 1,000 points and subtracting until player reaches exactly zero.

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 wor	ld"?
What advice would you give to a "new" student getting ready to do this a	ictivity.
	-

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.



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Power of 10
Focus:	Time

Materials:			
White boards	Vocabulary Notebooks	Activity at end of lesson plan	
Crayolas	Double 9 Dominoes (attached)		
Socks	decks of cards		

Opening

State the objective

Today we are going to practice using our math vocabulary and math skills to learn about the power of 10.

Gain prior knowledge by asking students the following questions

What happens if you multiply something by 10? Multiplying by ten is powerful. It can move a value forward. If we have 15 and we multiply by 10, we start with the 15 and add a zero so that we now have 150. If we begin with 20 and multiply by 10, we add a zero and have 200. What happens to 43 if you increase by the power of ten? What about 67? What about 82?

Content (the "Meat")				
Problem of the Day Ryan has 4 baskets. There are 3 cupcakes in each basket. How many cupcakes does Ryan	*Activity → Teachable Moment(s) <i>throughout</i>			
have in all? Fact Practice	During the lesson check in with students repeatedly.			
Spots and Dots There is a master of Double 9 Dominos attached to this lesson plan. You will need 1 full set for each pair of students in your class. It is recommended that you duplicate on card stock and if possible, laminate for use again in the future.	Check in about what is happening and what they are thinking. Take advantage of any			
Players sit across from each other. Dominoes are between them, face (or spots) down. Each student draws a domino and writes the addition problem on their white board, adding the numbers represented by the spots Example: Domino drawn is	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.			
Addition: 2 + 3 = 5	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.			
Math Vocabulary	It is important to review			
Word for Today: ten Description: The numeral 10 is very interesting. When you multiply by ten you can get the answer simply by adding a zero. If you multiply by 100 (which is really 10 by 10) you begin	academic math vocabulary often throughout the day. Complete the Vocabulary			



1	with the number and add 2 zeros. If you multiply by 1,000, you write the number and add hree zeros. So 9 x 10 = 90. 9 x 100 = 900, 9 x 1,000 = 9,000. Have students complete his/her Vocabulary Notebook, making an entry for the word "ten". /ocabulary Notebook Sample: New Word My Description ten multiplying by ten adds a 0 to the number Personal Connection Drawing		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 easily multiply by 10.	9,90,900,9,000	
	A Power of Ten Skip counting by10 is one way of understand we have 3 items x 10, we now have 30 items 140. The power of ten in multiplication is the addit with. Practice several of these problems on the bod 'times ten' really does. When they are comf how to draw a playing card (no face cards, jod 'times ten'' and write the total. For example, Then draw a second card, repeat the process the example, if the second time I draw a 7 ar have a total of 90. Demonstrate a third time. that is called Exactly 1,000. The challenge we playing the game with. Exactly 1,000 Directions: 1. Divide students into pairs. 2. Give each pair a deck of cards witho 3. Player 1 draws a card, multiplies the board. 4. Player 2 plays in the same way. 5. On the second turn, Player 1 repeat	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.	
	products goes over 1,000, he/she w total.	rs reaches 1,000 exactly. If the sum of the ill have to take another turn, not adding in the last arting with 1,000 points and subtracting until	



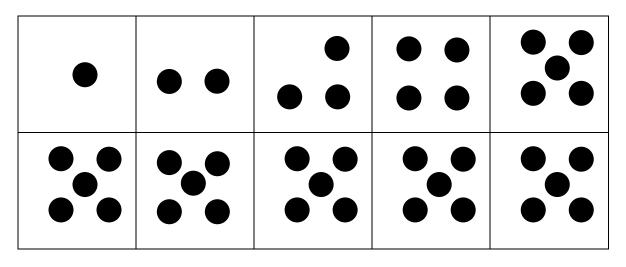
Closing	
Review	
Say:	
Please recap what we did today.	
Did we achieve our objectives?	
Debrief	
Three Whats	
Ask the following three what questions:	
What was your key learning for the day?	
What opportunities might you have to do this same thing in the "real world"?	
What advice would you give to a "new" student getting ready to do this activity?	
Reflection (Confirm, Tweak, Aha!)	

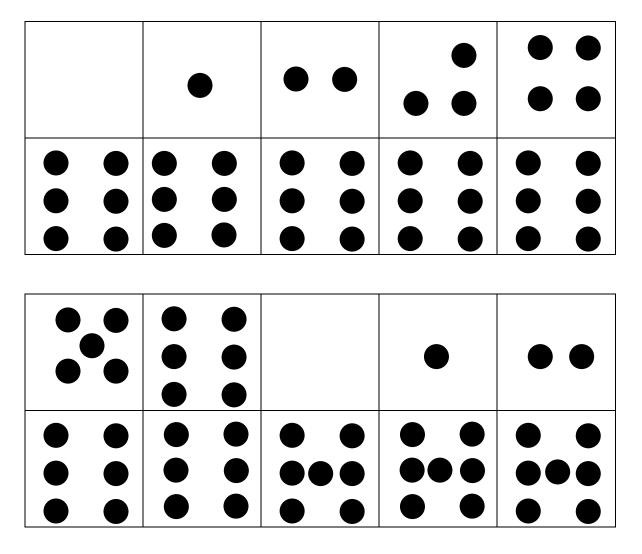
- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new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



Double 9 Dominoes

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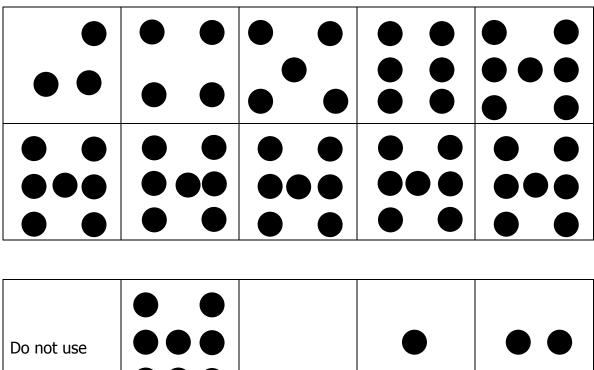




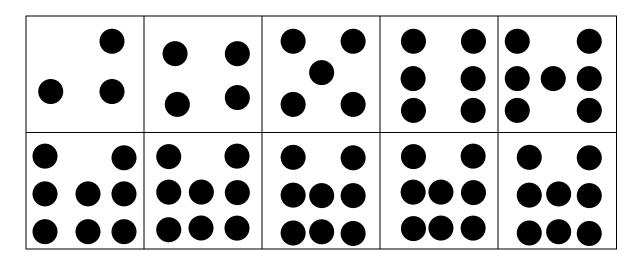




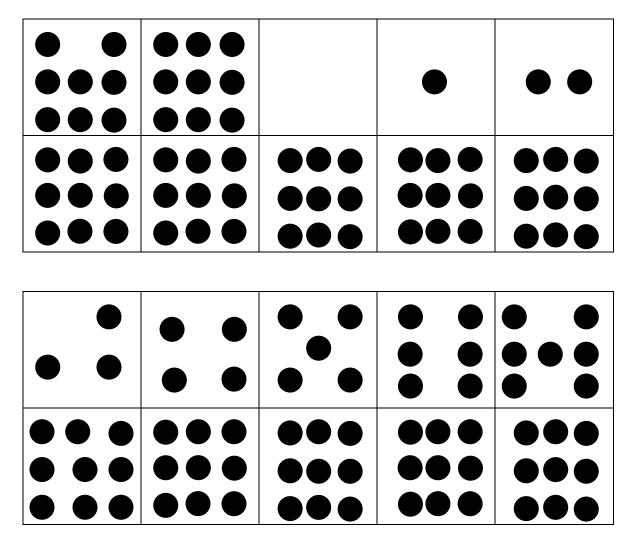




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Do not use	$\bullet \bullet \bullet$		









Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Math Fun!
Focus:	Review

Materials:

Materials for the games that students have learned this past few days

pening		
e objective		
Today we are going to have fun playing a game.		

	Content (the "Meat")	teams
	Activity	
Today is a review lesson.	Students should choose from the following activities:	
How Many? What's My Shape? Name That Fractior What Time? Exactly 1,000	1	

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

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.