Consult 4 Kids Lesson Plans

Component	Math
Grade Level:	First Grade
Lesson Title:	Name Those Coins #1
Focus:	Money

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 money.

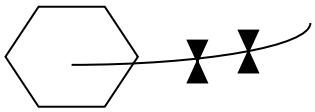
Gain prior knowledge by asking students the following questions

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 sides are there in total?



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

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.

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 Vocabulary

Word for Today: coins

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.

Review the entry for the term "coin" in your Vocabulary Notebook. Share with a peer.

Vocabulary Notebook Sample:

New Word	**My Description**
coin	penny, nickel, dime and quarter
Personal Connection	**Drawing**
I have 25¢ in my pocket.	

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.

Activity
Money

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: $.**.

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 25¢, add 10¢ to make 35¢ (this is like counting by tens), then you would count by 5s for the three nickels: beginning at 35¢, 1 nickel would make 40¢, a second nickel 45¢, the third nickel 50¢, and then you would

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.

count 2 additional pennies, saying 51¢ and finally 52¢. 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?

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 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

Consult 4 Kids Lesson Plans

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.

3 8 2

Fact Practice

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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 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, 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 Vocabulary

Word for Today: coins

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.

Review the entry for the term "coin" in your Vocabulary Notebook. Share with a peer.

Vocabulary Notebook Sample:

New Word	**My Description**
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Personal Connection	**Drawing**
I have 25¢ in my pocket.	

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

Activity

Money

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: $.**.

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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.

nickel would make 40¢, a second nickel 45¢, the third nickel 50¢, and then you would count 2 additional pennies, saying 51¢ and finally 52¢. 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:

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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.

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 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

Consult 4 Kids Lesson Plans

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 ¾ 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?

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.
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.

*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.

6 + 6 = 12
6 + 6 = 12
12 – 6 = 6
12 – 6 = 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, 6 and 12.

Math Vocabulary

Word for Today: fraction

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 ¾, it means that you have 3 of the 4 pieces the whole thing was divided into.

Create an entry for the term "fraction" in your Vocabulary Notebook. Share with a peer.

Vocabulary Notebook Sample:

New Word	My Description
fraction	two numbers, one on top of the other, that indicate less than a whole item
Personal Connection	**Drawing**
I will each ½ of a sandwich for lunch.	

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
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.
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.

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.

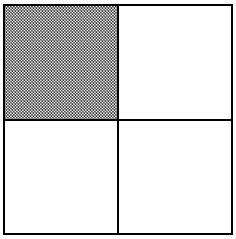
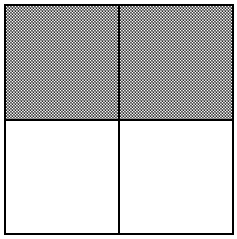
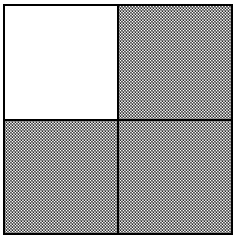
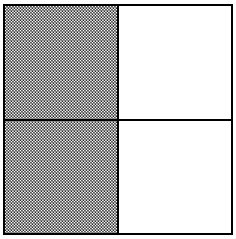
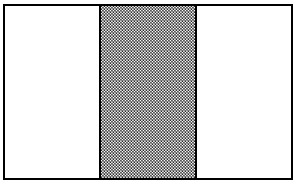
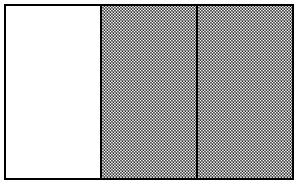
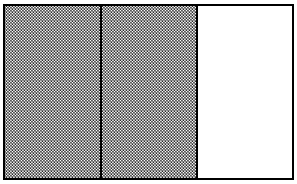
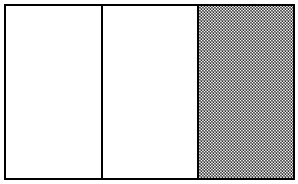
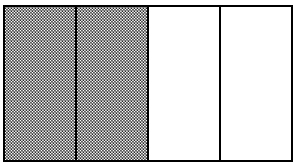
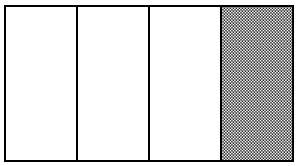
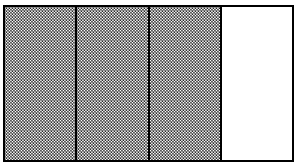
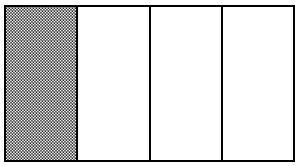
2. Give each pair a How Many Pieces card and either a white board or paper. 3. Working together the pair will identify a fraction to explain the drawing, or draw a picture to explain the fraction. 4. When paid is finished, they should join another pair and compare the work they have done as well as the 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? 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?

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 How Many Pieces?

			
			
			
$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{2}{3}$
$\frac{3}{4}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{7}{8}$

Consult 4 Kids Lesson Plans

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 ¾ 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? Explain your thinking.

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.
Today you will introduce this activity and begin with the Fact Family of 3, 4, and 7.

*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.

3 + 4 = 7
4 + 3 = 7
7 – 4 = 3
7 – 3 = 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 3, 4, and 7.

Math Vocabulary

Word for Today: fraction

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 ¾, it means that you have 3 of the 4 pieces the whole thing was divided into.

Create an entry for the term "fraction" in your Vocabulary Notebook. Share with a peer.

Vocabulary Notebook Sample:

New Word	**My Description**
fraction	two numbers, one on top of the other, that indicate less than a whole item
Personal Connection	**Drawing**
I will each ½ of a sandwich for lunch.	

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.

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.

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?

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.

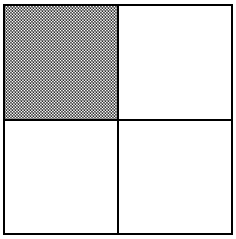
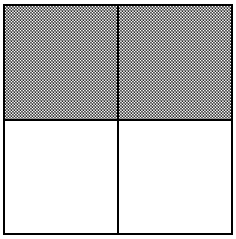
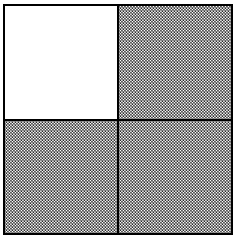
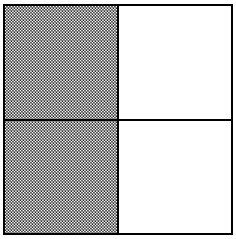
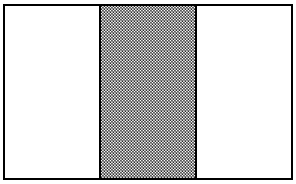
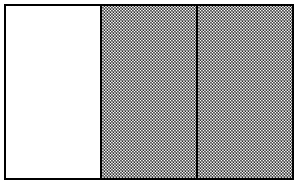
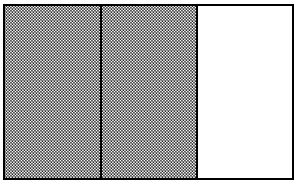
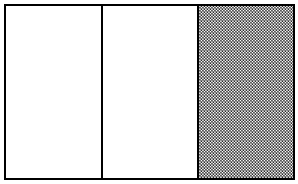
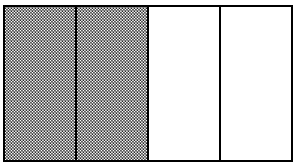
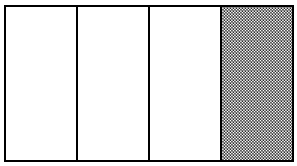
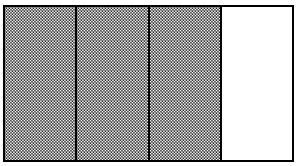
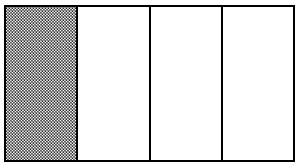
Directions: 1. Divide students into pairs. 2. Give each pair a How Many Pieces card and either a white board or paper. 3. Working together the pair will identify a fraction to explain the drawing, or draw a picture to explain the fraction. 4. When paid is finished, they should join another pair and compare 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?

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 How Many Pieces?

			
			
			
$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{2}{3}$
$\frac{3}{4}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{7}{8}$

Consult 4 Kids Lesson Plans

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

Stamps cost 44¢. If you have 2 stamps, how much do the stamps cost?

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.
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.

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.

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.

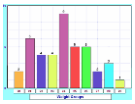
Math Vocabulary

Word for today: 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:

New Word	**My Description**
graph	a chart that shows values of certain items
Personal Connection	**Drawing**
I made a graph to show how many people like raisins.	

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
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 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
Directions:

1. Divide students into pairs.
2. Give each pair a cup or package of Gummy Bears, a piece of paper and a box of crayons.
3. Ask each pair to work together to create a graph that they can share with other

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.

students that will demonstrate the Gummy Bears they have. 4. Have students create at least 3 questions that can be answered by their graph. 5. When graphs are finished, have pairs share the graphs with the class. 6. 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?

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.

Consult 4 Kids Lesson Plans

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

Write the numbers below from the smallest to the largest.

41 37 56 73 46 65

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

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.

correct response.
Today you will introduce this activity and begin with the Fact Family of 3, 6, and 9.
Have students write the entire Fact Family on the white board.

3 + 6 = 9
6 + 3 = 9
9 – 3 = 6
9 – 6 =3

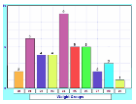
Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times.
Remember that today they are only doing the Fact Family of 3, 6, and 9.

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:

New Word	**My Description**
graph	a chart that shows values of certain items
Personal Connection	**Drawing**
I made a graph to show how many people like raisins.	

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

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.

Lucky Charms
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 cup of Lucky Charms, a piece of paper and a box of crayons. 3. 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. 4. Have students create at least 3 questions that can be answered by their graph. 5. When graphs are finished, have pairs share the graphs with the class. 6. 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 math? Give examples of even numbers. Give examples of odd numbers.

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.

Consult 4 Kids Lesson Plans

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.

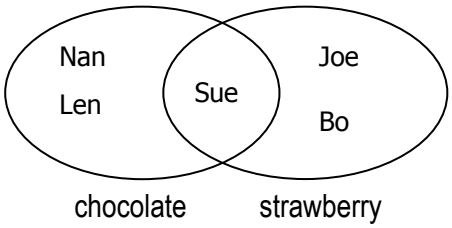
Gain prior knowledge by asking students the following questions

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?



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".

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.

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.

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.

3 + 7 = 10
7 + 3 = 10
10 – 3 = 7
10 – 7 = 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, 7, and 10.

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:

New Word	My Description
word problems	the story that informs the number sentence
Personal Connection	**Drawing**
The word problem said to add 3 cookies and 5 cookies.	 1 rose + 1 rose = 2 roses

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
Word Problems

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?

2. 8 cookies + 5 cookies = 13 cookies in all

The first is the problem, the second the number sentence representing the problem.

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.

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. 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 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?

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 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 =**

Consult 4 Kids Lesson Plans

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 you 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

John has 14 cupcakes. He hides 7 of them. How many cupcakes are hidden?

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.
Today you will introduce this activity and begin with the Fact Family of 3, 8, and 11.

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.

3 + 8 = 11
8 + 3 = 11
11 – 3 = 8
11 – 8 = 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. Ask students to give you examples of doubles. Ask students to tell how doubles are different than other fact families.

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 review the entry in the Vocabulary Notebook for the term **word problems**.

Vocabulary Notebook Sample:

New Word	**My Description**
word problems	the story that informs the number sentence
Personal Connection	**Drawing**
The word problem said to add 3 cookies and 5 cookies.	 1 rose + 1 rose = 2 roses

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
Word Problems

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?

2. 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

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.

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 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.

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 =**

Consult 4 Kids Lesson Plans

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?

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.
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.

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.

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, 9, and 12.

Math Vocabulary

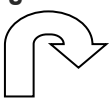
Concept for Today: in and out

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 "out" refers to the answer or the end result. Try this "in" + 2.

In	3	4	5
Out	5		

Have children review the Vocabulary notebook for the concept of "in and out".

Vocabulary Notebook Sample:

New Word	**My Description**
in and out	In: 3, 4, 5 / Out: 5
Personal Connection	**Drawing**
Can you apply the in and out pattern?	 in

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
Operations

In and Out Puzzles

We can find patterns in numbers. For example, if a "rule" is to add 2, there is a pattern to how numbers will progress.

For example if the rule is to add 2, look at the number in and determine the number 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.

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 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? If you put 6 in and you already have 2, what will come out?

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 In and Out Puzzles

Rule: + 10

In	Out
	35
50	
60	

Rule: -8

In	Out
25	
	10
95	

Rule: +20

In	Out
24	
	30
60	

Rule: -10

In	Out
19	
59	
	29

Rule: -15

In	Out
19	
	35
58	

Rule: +25

In	Out
50	
25	
	78

Rule: - 25

In	Out
25	
	50
50	

Rule: +20

In	Out
20	
30	
	90

Rule: +5

In	Out
23	
	35
	58

Rule: +12

In	Out
14	
36	
	36

Consult 4 Kids Lesson Plans

Rule: +7

In	Out
14	
	42
	56

Rule: -4

In	Out
12	
	20
	14

Rule: -12

In	Out
48	
	60
	12

Rule: +8

In	Out
20	
	48
16	

Rule: +7

In	Out
15	
	42
29	

Rule: -3

In	Out
17	
37	
	70

Rule: + 11

In	Out
13	
42	
	91

Rule: -4

In	Out
	12
36	
87	

Rule: +15

In	Out
10	
	35
40	

Rule: - 6

In	Out
20	
68	
81	

Consult 4 Kids Lesson Plans

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?

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.
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.

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.

8 + 11 = 19
11 + 8 = 19
19 - 8 = 11
19 – 11 = 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, 11, 19.

Math Vocabulary

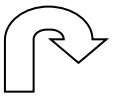
Concept for Today: in and out

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 "out" refers to the answer or the end result. Try this "in" + 2.

In	3	4	5
Out	5		

Have children review the Vocabulary notebook for the concept of "in and out".

Vocabulary Notebook Sample:

New Word	**My Description**
in and out	In: 3, 4, 5 / Out: 5
Personal Connection	**Drawing**
Can you apply the in and out pattern?	 in

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
Operations

In and Out Puzzles

We can find patterns in numbers. For example, if a "rule" is to add 2, there is a pattern to how numbers will progress.
For example if the rule is to add 2, look at the number in and determine the number 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.

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 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

In	Out
	35
50	
60	

Rule: -8

In	Out
25	
	10
95	

Rule: +20

In	Out
24	
	30
60	

Rule: -10

In	Out
19	
59	
	29

Rule: -15

In	Out
19	
	35
58	

Rule: +25

In	Out
50	
25	
	78

Rule: - 25

In	Out
25	
	50
50	

Rule: +20

In	Out
20	
30	
	90

Rule: +5

In	Out
23	
	35
	58

Rule: +12

In	Out
14	
36	
	36

Consult 4 Kids Lesson Plans

Rule: +7

In	Out
14	
	42
	56

Rule: -4

In	Out
12	
	20
	14

Rule: -12

In	Out
48	
	60
	12

Rule: +8

In	Out
20	
	48
16	

Rule: +7

In	Out
15	
	42
29	

Rule: -3

In	Out
17	
37	
	70

Rule: + 11

In	Out
13	
42	
	91

Rule: -4

In	Out
	12
36	
87	

Rule: +15

In	Out
10	
	35
40	

Rule: - 6

In	Out
20	
68	
81	

Consult 4 Kids Lesson Plans

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.

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.
Today you will introduce this activity and begin with the Fact Family of 2, 9 and 11.
Have students write the entire Fact Family on the white board.

2 + 9 = 11

*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.

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?** **Gummy Bears** **Lucky Charms** **Word Problems** **In and 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.

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.