

| Component | Math |
|---------------|--------------------|
| Grade Level: | First Grade |
| Lesson Title: | This Is The Sum #1 |
| Focus: | Addition |

Materials:

White boards

deck of cards

Crayolas

Socks (for erasers)

Opening

State the objective

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

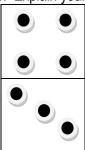
Gain prior knowledge by asking students the following questions

What do you know about addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: Jorge has 5 marbles. He wins 4 marbles. How many does he have altogether?

Content (the "Meat")

Problem of the Day

Look at the domino below. Write a number sentence to show how many dots are on the domino. Explain your answer.



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.)

Fact Practice

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".

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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



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, 7, and 10. Have students write the entire Fact Family on the white board.

- 3 + 7 = 10
- 7 + 3 = 1
- 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: plus

Description: The term plus means addition. It means that you have something to start with and you are going to add something to it. When we read an addition problem we say 5 plus 4 equals 9. We write it this way: 5 + 4 = 9.

Create an entry for "plus" in your Vocabulary Notebook. Talk with a partner about what this word means. Use it in a sentence.

Vocabulary Notebook Sample:

| New Word | My Description |
|--|--|
| plus | Adding two things together is done when you say this plus this |
| Personal Connection | Drawing |
| It is easier to do a plus problem than a minus problem | |

It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Vocabulary Notebooks can be made from ½ of a composition book.

Students will complete this notebook for each vocabulary word that they are given.

Activity Addition

Addition

Addition is the math operation that has you combine two numbers or two groups of items. For example if you have the following:

| \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc | \bigcirc \bigcirc \bigcirc \bigcirc |
|--|---|
| \odot | $\odot \odot \odot \odot$ |

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.



you could simply count the happy faces. Or you count the number of faces in the first box (6) and the number in the second box (8), and write the math problem 6 + 8 =or

6

+8

No matter which way you do the problem, the total number of happy faces is 14. If students are struggling with addition problems, they should draw the problem. This obviously becomes cumbersome when the numbers are large, but can be helpful when learning the process.

Work 8-10 problems on the board with the students. Encourage students to complete the problems on their own white board, showing the answers that he/she has.

This Is The Sum

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a deck of cards with face cards, jokers, and 10s removed, and a white board.
- 3. Shuffle the cards and deal them out equally to the two players.
- 4. Player places his/her cards face down in front of him/her.
- 5. Each player turns over a card and the pair writes the equation on the white board with the correct total.
- 6. Play is over when pair has 15 problems.

| _ | | |
|-----|-----|-----|
| 721 | 00 | ına |
| U | osi | |
| | | ₩. |
| | | |

Review

Say:

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

Debrief

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

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

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

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



| Component | Math |
|---------------|--------------------|
| Grade Level: | First Grade |
| Lesson Title: | This Is The Sum #2 |
| Focus: | Addition |

Materials:

White boards

deck of cards

Crayolas

Socks (for erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: Joni has 5 bows for her hair. Lori has 9 bows. How many bows do they have together?

Content (the "Meat")

Problem of the Day

If John has 10 red crayons and 2 blue crayons in a baggie and without looking he reaches in and takes out one of the crayons, what color is he most likely to pull out? How do you know?

Fact Practice

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

1 + 2 = 3

2 + 1 = 3

3 - 2 = 1

3 - 1 = 2

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

The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2=1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5th day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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



Today you will introduce this activity and begin with the Fact Family of 4, 7, and 11. Have students write the entire Fact Family on the white board.

4 + 7 = 11

7 + 4 = 11

11 - 4 = 7

11 - 7 = 4

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 4, 7 and 11.

Math Vocabulary

Word for Today: equal

Description: The term equal means that two things have the same value. 3 + 6 has the same value as 4 + 5. Both of these equations equal 9. An equal sign is two short lines written one on top of the other. The symbol signals that two things are the same.

Vocabulary Notebook Sample:

| New Word | My Description |
|---------------------------|----------------------------------|
| equal | 5 + 3 and 6 + 2 have equal value |
| Personal Connection | Drawing |
| These two sums are equal. | |
| | |
| | |

It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word.

When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Vocabulary Notebooks can

be made from ½ of a composition book.

Students will complete this notebook for each vocabulary word that they are given.

Activity Addition

Addition

Addition is the math operation that has you combine two numbers or two groups of items. For example if you have the following:



you could simply count the happy faces. Or you count the number of faces in the first box (6) and the number in the second box (8), and write the math problem 6 + 8 =or

0 8+

No matter which way you do the problem, the total number of happy faces is 14. If students are struggling with addition problems, they should draw the problem. This obviously becomes cumbersome when the numbers are large, but can be helpful when learning the process.

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Work 8-10 problems on the board with the students. Encourage students to complete the problems on their own white board, showing the answers that he/she has.

This Is The Sum Directions:

- 1. Divide students into pairs.
- 2. Give each pair a deck of cards with face cards, jokers, and 10s removed, and a white board.
- 3. Shuffle the cards and deal them out equally to the two players.
- 4. Player places his/her cards face down in front of him/her.
- 5. Each player turns over a card and the pair writes the equation on the white board with the correct total.
- 6. Play is over when pair has 15 problems.

| \sim | | |
|--------|-----|--------|
| | 001 | \sim |
| | 081 | ш |
| • | osi | шч |

Review

Say:

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

Debrief

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

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

What is a number?

What is a letter?

Are they the same?

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



| Component | Math | |
|---------------|---------------------------|--|
| Grade Level: | First Grade | |
| Lesson Title: | What's the Difference? #1 | |
| Focus: | Subtraction | |

| Materials: | | |
|--------------|--|--|
| White boards | Activity at the end of the lesson plan | |
| Crayolas | | |
| Socks | | |

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about subtraction? What do you call the answer to a subtraction problem? There is a sign that indicates subtraction. What do you call that sign? How do the words "take away" and "minus" used in a subtraction problem? What strategies do you used to subtract?

Content (the "Meat")

Problem of the Day

Joe has 9 cookies. He eats 3 cookies. How many cookies does he have left? Explain your answer.

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 5, 7, and 12.

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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



Have students write the entire Fact Family on the white board.

5 + 7 = 12

7 + 5= 12

12 - 5 = 7

12 - 7 = 5

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 5, 7, and 12. Share with students that this fact is a double—the addends are the same.

Math Vocabulary

Word for Today: minus

Description: The term minus refers to the sign that indicates you need to subtract. It is a straight line. When you minus one number from another, you make the larger number less by the second number that you say after the word minus. We would read a math problem like this: 5 minus 3 equals 2. We would write it 5 - 3 = 2

Have children complete the Vocabulary notebook.

Vocabulary Notebook Sample:

| New Word | My Description |
|---|--|
| minus | Minus means to make less by a certain number |
| Personal Connection | Drawing |
| I am 8 years old. My brother is 3. 8 – 3 = 5, and I am 5 years older. | minus |

It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word.

When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation)
Vocabulary Notebooks can be made from ½ of a

composition book

Students will complete this notebook for each vocabulary word that they are given.

Activity Subtraction

Subtraction

Subtraction is a math operation that begins with a total number and then removes part of that total. The difference is what is left AFTER you have removed a certain number of objects. If you start with 9 happy faces and you remove 6 happy faces (the number being placed in the second box, the subtraction problem will tell you how many are left in the first box.

| $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ | $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ |
|--|---|
| \rightarrow | \odot |
| $(\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc)$ $\bigcirc\bigcirc\rightarrow$ | |
| \downarrow | |
| $\bigcirc\bigcirc\bigcirc\bigcirc$ | |

The problem is written: 9 - 6 = 3 or

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.



9 -6 3

Subtraction is the reciprocal of addition. Instead of trying to find the total, you know the total and are trying to find the difference in the total if you remove several of the objects from the group.

Rather than demonstrating this with white boards and erasing objects, have the students use small Post-Its. Draw a circle on the white board. Ask students to give you a number of Post-Its to use under 20. Place that number of Post-Its in the circle. Count them and write the number under the circle. Draw a second circle to the right of the first, and ask students how many of the Post-Its from the first circle they would like to move to the second circle. Physically move those Post-Its and write the number underneath the second circle. Now ask the students how many Post-Its are left in the original circle. This then becomes the difference. Write each of the subtraction problems in the horizontal and vertical form after you have done the manipulation with the Post-Its.

What's The Difference?

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a What's The Difference Problem Board and piece of blank paper. (Note: If you want to use the game board more than one, laminate or put in a sheet protector)
- 3. Have students fold the paper until they have 8 spaces on one side and 8 on the other. (This will become the paper they write the problems on.)
- 4. Working together, the pair follows the directions on the Problem Board and then writes the subtraction problem on the blank paper, one problem per box.
- 5. When pair is finished, they share their problems with another pair and compare.

| ^ i | | |
|------------|-----|----|
| 7 | osi | nn |
| VI | USI | шч |
| | | |

Review

Say:

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

Debrief

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

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

What is a cylinder?

Where can you see them in the world?

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)



- 3. Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- 4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade What's The Difference

| Cross out 4 hearts | Cross out 3 happy faces | Cross out 2 suns | Cross out 5 spades | |
|--|--|-------------------|--------------------|--|
| * * * * * | 00000 | * * * * * | *** | |
| * * * * * | $\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc$ | * * * * * | *** | |
| ~ ~ ~ ~ ~ | \odot | * * * * | *** | |
| Write the problem | Write the problem | Write the problem | Write the problem | |
| Cross out 0 hearts | Cross out 8 happy faces | Cross out 7 suns | Cross out 8 spades | |
| * * * * * | 00000 | * * * * * | * * * * * | |
| ~ ~ ~ ~ | | * * * * * * | *** | |
| * * * * | | * * * * | * * * * * | |
| Write the problem | $\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc$ | | Write the problem | |
| Write the problem | Write the problem | Write the problem | write the problem | |
| Cross out 5 hearts | Cross out 6 happy faces | Cross out 1 sun | Cross our 6 spades | |
| | | | | |
| * * * * * | | * * * * * | * * * * * | |
| * * * * * | | * * * * * | * * * * * | |
| * * * | | * * * * | * * * * * | |
| Write the problem | Write the problem | Write the problem | Write the problem | |
| Cross out 9 hearts | Cross out 4 happy faces | Cross out 8 suns | Cross out 3 spades | |
| •••• | 00000 | * * * * * | * * * * | |
| | | * * * * * * | | |
| ~ ~ ~ ~ ~ | | * * * * * * | * * * * * | |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | | . 1 | Mrite the problem | |
| Write the problem | Write the problem | Write the problem | Write the problem | |



| Component | Math | |
|---------------|---------------------------|--|
| Grade Level: | First Grade | |
| Lesson Title: | What's The Difference? #2 | |
| Focus: | Subtraction | |

Materials:

White boards decks of cards with face cards and jokers removed

Crayolas Activity at the end of the lesson plan

Socks (for erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about subtraction? What does the word, "minus" mean and have to do with subtraction? What do the words difference and take away have to do with subtraction? Please write a number sentence that shows this story: Joe has 8 ice cream bars. Frank ate 3 of the ice cream bars. How many ice cream bars does Joe have left?

Content (the "Meat")

Problem of the Day

Look at the following 4 problems. How many of them have the same sum? How do you know?

5 + 5 =

6 + 4 =

3 + 6 =

8 + 2 =

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 openended questions to determine what the rest of the group is thinking.



You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 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, 7, and 13. Have students write the entire Fact Family on the white board.

6 + 7 = 13

7 + 6 = 13

13 - 6 = 7

13 - 7 = 6

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 6, 7, and 13.

Math Vocabulary

Word for Today: difference

Description: The term difference is the word we use to talk about the answer in an subtraction problem. When you subtract the numbers 9 - 6 you will have a difference of 3. This answer is the difference. Complete an entry for sum in your Vocabulary Notebook.

Vocabulary Notebook Sample:

| New Word | My Description |
|--|------------------------------|
| difference | the answer when you subtract |
| Personal Connection | Drawing |
| The difference between 9 and 6 is three. | 9-6-3 |

It is important to review academic math vocabulary often throughout the day.

Complete the Vocabulary notebook for each word.

When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Vocabulary Notebooks can be made from ½ of a composition book.

Students will complete this notebook for each vocabulary word that they are given.

Activity Subtraction

Subtraction

Subtraction is a math operation that begins with a total number and then removes part of that total. The difference is what is left AFTER you have removed a certain number of objects. If you start with 9 happy faces and you remove 6 happy faces (the number being placed in the second box, the subtraction problem will tell you how many are left in the first box.

| $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ | $\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc$ |
|---|--|
| \rightarrow | \odot |
| $(\bigcirc \bigcirc \bigcirc \bigcirc)$ $\bigcirc \rightarrow$ | |
| \downarrow | |
| $\odot \odot \odot$ | |

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



The problem is written: 9 - 6 = 3 or

9 <u>-6</u> 3

Subtraction is the reciprocal of addition. Instead of trying to find the total, you know the total and are trying to find the difference in the total if you remove several of the objects from the group.

Rather than demonstrating this with white boards and erasing objects, have the students use small Post-Its. Draw a circle on the white board. Ask students to give you a number of Post-Its to use under 20. Place that number of Post-Its in the circle. Count them and write the number under the circle. Draw a second circle to the right of the first, and ask students how many of the Post-Its from the first circle they would like to move to the second circle. Physically move those Post-Its and write the number underneath the second circle. Now ask the students how many Post-Its are left in the original circle. This then becomes the difference. Write each of the subtraction problems in the horizontal and vertical form after you have done the manipulation with the Post-Its.

What's The Difference?

Directions:

- 1. Divide students into pairs.
- Give each pair a What's The Difference Problem Board and piece of blank paper. (Note: If you want to use the game board more than one, laminate or put in a sheet protector)
- 3. Have students fold the paper until they have 8 spaces on one side and 8 on the other. (This will become the paper they write the problems on.)
- 4. Working together, the pair follows the directions on the Problem Board and then writes the subtraction problem on the blank paper, one problem per box.
- 5. When pair is finished, they share their problems with another pair and compare.

| | Closing |
|--------|---|
| | Review |
| Say: | |
| • | Please recap what we did today. |
| • | Did we achieve our objectives? |
| | |
| | Debrief |
| What o | lid you like about what we did today in math? |
| How ca | an you use the information from today in school tomorrow? |

- 1. Ask students to think about what they did today in math.
- 2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- 3. Ask them to comment on what they did today that was like something they had done before except in one



particular way which was new to them. (Tweak)

4. Ask them to comment on something (if anything) they have learned today that was brand new to them.



1st Grade What's The Difference

| Cross out 4 hearts | Cross out 3 happy faces | Cross out 2 suns | Cross out 5 spades | |
|-----------------------|-------------------------|-------------------|--------------------|--|
| * * * * * | 00000 | * * * * * | * * * * * | |
| * * * * * | 00000 | * * * * * | * * * * * | |
| ~ ~ ~ ~ ~ | \odot | * * * * | * * * * * | |
| Write the problem | Write the problem | Write the problem | Write the problem | |
| Cross out 0 hearts | Cross out 8 happy faces | Cross out 7 suns | Cross out 8 spades | |
| * * * * * | 00000 | * * * * * | * * * * * | |
| * * * * | | * * * * * * | * * * * * | |
| * * * * | | * * * * | * * * * * | |
| Write the problem | | | Write the problem | |
| Write the problem | Write the problem | Write the problem | vviite the problem | |
| Cross out 5 hearts | Cross out 6 happy faces | Cross out 1 sun | Cross our 6 spades | |
| | | | | |
| * * * * * | | * * * * * | * * * * * | |
| * * * * * | | * * * * * | * * * * * | |
| * * * | | * * * * | * * * * * | |
| Write the problem | Write the problem | Write the problem | Write the problem | |
| Cross out 9 hearts | Cross out 4 happy faces | Cross out 8 suns | Cross out 3 spades | |
| •••• | 00000 | * * * * * | * * * * * | |
| | 00000 | * * * * * * | * * * * * | |
| • • • | 00000 | * * * * * * | | |
| \\/\nito the grabless | | | ♦ ♦ ♦ ♦ | |
| Write the problem | Write the problem | Write the problem | Write the problem | |



| Component | Math |
|---------------|----------------------|
| Grade Level: | First Grade |
| Lesson Title: | What's My Number? #1 |
| Focus: | Subtraction |

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What steps do you take to find the right answer to a subtraction problem? What do you call the answer to a subtraction problem? Write a number sentence that shows that you are subtracting. Now write a story about the number sentence. Share it with a peer.

Content (the "Meat")

Problem of the Day

Jill has 7 dolls. She receives 2 for her birthday. How many dolls does she have now? 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 8, 7 and 15. 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 openended questions to determine what the rest of the group is thinking.



8 + 7 = 15

7 + 8 = 15

15 - 8 = 7

15 - 7 = 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, 7 and 15.

Math Vocabulary

Word for today: subtraction

Description: The term subtraction refers to an operation in math where you start with a total and then take some of it away and then you find out how much you have left. Subtraction is the opposite of addition.

Have children complete the vocabulary notebook for the word context.

Vocabulary Notebook Sample:

| New Word | My Description |
|------------------------------------|------------------------------------|
| subtraction | taking something away from a total |
| Personal Connection | Drawing |
| I like to do subtraction problems. | subtract |

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 Subtraction

Subtraction

Sometimes using a number line to subtract is helpful. Instead of moving forward, you would be moving backwards (or toward zero).

To work on a number line, you position your pencil or marker on the first number in the problem (the minuend). You then move toward the 0 the number of spaces indicated by the second number (the subtrahend), and the number you land on is the answer (the difference). It is important to give children the vocabulary to talk through the subtraction problem.

Draw a number line on the white board or chart paper that moves from 0 to 10. Using the number line, begin on the minuend, hop or move backwards the number indicated by the minuend, and then find the difference. Write the problem horizontally. Complete several problems with the students before having them work on their own.

What's My Number?

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a number line and a set of What's My Number cards. Students will also need a white board.
- 3. Together, pair draws a What's My Number card and then uses the number line to

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



solve the problem.

- 4. When they have solved the problem, they should record it on the white board.
- 5. When pair is finished they should share their problems with another pair of students.

| • | | |
|------|--------|---|
| (1 | osing | 7 |
| - CI | USIIII | ı |
| | | |

Review

Say:

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

Debrief

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

What would you like to do more of next time?

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

Where can you find those shapes in the world?

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

1st Grade What's My Number

| 5 – 2 = | 4 – 2 = | 6 – 3 = | 6 – 4 = |
|---------|---------|---------|---------|
| 9 – 3 = | 9 – 2 = | 7 – 5 = | 7 – 3 = |
| 8 – 6 = | 8 – 2 = | 8 – 4 = | 8 – 5 = |
| 8 – 3 = | 9 – 7 = | 9 – 6 = | 9 – 5 = |
| 4 – 4 = | 8 – 8 = | 7 – 4 = | 7 – 1 = |
| 6 – 2 = | 5 – 3 = | 5 – 4 = | 7 – 6 = |
| 9 – 8 = | 8 – 7 = | 9 – 1 = | 1 – 1 = |



1st Grade What's My Number





| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |



| Component | Math |
|---------------|----------------------|
| Grade Level: | First Grade |
| Lesson Title: | What's My Number? #2 |
| Focus: | Subtraction |

Materials:

White boards

Activity at the end of the lesson plan

Crayolas

Socks (for erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What steps do you take to find the right answer to a subtraction problem? What do you call the answer to a subtraction problem? Write a number sentence that shows that you are subtracting. Now write a story about the number sentence. Share it with a peer.

Content (the "Meat")

Problem of the Day

Look at the calendar below. If it is the 11th of the month and your birthday is in 5 days, what is the date of your birthday? Explain your answer.

| S | М | T | W | T | F | S |
|----|----|----|----|----|----|----|
| | 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 | | | | |

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

*Activity → Teachable Moment(s) throughout

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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



$$3 - 1 = 2$$

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 7, 9 and 16. Have students write the entire Fact Family on the white board.

$$7 + 9 = 16$$

9 + 7 = 16

16 - 7 = 9

16 - 9 = 7

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 7, 9, and 16.

Math Vocabulary

Word for today: number sentence

Description: The term number sentence refers to the problem that we write that demonstrates the math for the story we read. A number sentence can look like this: 8-3=5 is a number sentence. The story is this: Judy had 8 cookies. She gave 3 to her best friend. How many cookies does Judy have left. Write a number sentence for this story: Judy has 9 flowers. She gave 4 to her grandmother. How many flowers does she have left?

Review the entry in your Vocabulary Notebook for the word number sentence. Add anything that you think is important.

Vocabulary Notebook Sample:

| New Word | My Description |
|---|---|
| number sentence | Number sentences tell you how numbers are related |
| Personal Connection | Drawing |
| I had 8 pieces of candy. I game my sister 2 pieces. Now I have 6 pieces left. | 8-2-6 |

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

Vocabulary Notebooks can be made from ½ of a composition book.

acting out an equation).

Activity

Subtraction

Sometimes using a number line to subtract is helpful. Instead of moving forward, you would be moving backwards (or toward zero).

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it



To work on a number line, you position your pencil or marker on the first number in the problem (the minuend). You then move toward the 0 the number of spaces indicated by the second number (the subtrahend), and the number you land on is the answer (the difference). It is important to give children the vocabulary to talk through the subtraction problem.

in the "When Homework Is Complete" center.

Draw a number line on the white board or chart paper that moves from 0 to 10. Using the number line, begin on the minuend, hop or move backwards the number indicated by the minuend, and then find the difference. Write the problem horizontally. Complete several problems with the students before having them work on their own.

What's My Number?

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a number line and a set of What's My Number cards. Students will also need a white board.
- 3. Together, pair draws a What's My Number card and then uses the number line to solve the problem.
- 4. When they have solved the problem, they should record it on the white board.
- 5. When pair is finished they should share their problems with another pair of students.

Closing

Review

Say:

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

Debrief

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

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

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

Where can you find those shapes in the world?

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

1st Grade What's My Number

| 5 – 2 = | 4 – 2 = | 6 – 3 = | 6 – 4 = |
|---------|---------|---------|---------|
| 9 – 3 = | 9 – 2 = | 7 – 5 = | 7 – 3 = |
| 8 – 6 = | 8 – 2 = | 8 – 4 = | 8 – 5 = |
| 8 – 3 = | 9 – 7 = | 9 – 6 = | 9 – 5 = |
| 4 – 4 = | 8 – 8 = | 7 – 4 = | 7 – 1 = |
| 6 – 2 = | 5 – 3 = | 5 – 4 = | 7 – 6 = |
| 9 – 8 = | 8 – 7 = | 9 – 1 = | 1 – 1 = |



1st Grade What's My Number





| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |



| Component | Math |
|---------------|------------------|
| Grade Level: | First Grade |
| Lesson Title: | Decoder Clues #1 |
| Focus: | Subtraction |

Materials:

White boards

Activity at the end of this lesson plan

Crayolas

Socks (use as erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about subtraction? Give a number sentence that gives a subtraction problem. Tell the story that goes with this number sentence. Share with a peer. Do the same thing all over again. What does the word difference mean? In your number sentence, which number is the minuend? Which is the subtrahend?

Content (the "Meat")

Problem of the Day

John has a quarter. Joan has a dime. Which one has the most money? Explain your answer.

Fact Practice

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

1 + 2 = 3

2 + 1 = 3

3 - 2 = 1

3 - 1 = 2

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

The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2=1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5^{th} day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.

Today you will introduce this activity and begin with the Fact Family of 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 openended questions to determine what the rest of the group is thinking.



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.

Math Vocabulary

Word for Today: minuend

Description: The term minuend is used to describe the total in a subtraction problem that you are subtracting from. In a number sentence, the minuend is the first number in the problem. In the problem, 6 - 2 = 4, the 6 is the minuend.

Have children revisit the entry in the Vocabulary Notebook for the word **how many**.

Vocabulary Notebook Sample:

| New Word | My Description |
|---|------------------------------|
| minuend | the number you subtract from |
| Personal Connection | Drawing |
| In the number sentence 9 – 3 = 6, 9 is the minuend. | - 3 = 6 |

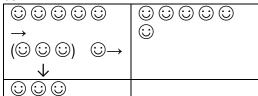
It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). Vocabulary Notebooks can be made from ½ of a

composition book.

Activity Subtraction

Subtraction

Subtraction is a math operation that begins with a total number and then removes part of that total. The difference is what is left AFTER you have removed a certain number of objects. If you start with 9 happy faces and you remove 6 happy faces (the number being placed in the second box, the subtraction problem will tell you how many are left in the first box.



The problem is written: 9 - 6 = 3 or

9 <u>-6</u> 3 Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Subtraction is the reciprocal of addition. Instead of trying to find the total, you know the total and are trying to find the difference in the total if you remove several of the objects from the group.

Review several subtraction problems with the students. Have them write them on a white board while you write them on chart paper or a large white board. Work through the process, reminding students of the number line and the Post-Its.

Explain the today the subtraction problems will give them the clues they need to find an answer to a riddle.

Decoder Clues

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a Decoder Clues problem sheet and white boards.
- 3. Working together, pairs complete each of the problems.
- 4. When the problems are completed, pair should take the letter of the problem and plug the letters into the riddle card.
- 5. If the problems were completed correctly, the answer to the riddle will be obvious. (Not all letters may be used in the answer).

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

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



1st Grade Decoder Clues

| R | E | Р | V | L |
|-----------------|------------|------------|------------------|------------|
| | | | | |
| | | | | |
| 8 | 9 | 6 | 10 | 9 |
| <u>- 7</u> | <u>- 6</u> | <u>-1</u> | 10 <u>- 2</u> | <u>-2</u> |
| | | | | |
| S | В | Т | Р | Q |
| | | | | |
| | | | | |
| 9 | 8 | 10 | 7 | 11 |
| <u>-9</u> | <u>- 4</u> | <u>-4</u> | <u>-5</u> | <u>-2</u> |
| | | | | |
| 0 | U | N | Α | G |
| | | | | |
| | | | | |
| 18 <u>-5</u> | 12 | 15 | 14 <u>- 3</u> | 17 |
| <u>-5</u> | <u>-2</u> | <u>- 3</u> | <u>- 3</u> | <u>- 3</u> |
| | | | | |
| | | | | |



Riddle for Day #7

| (|) | | 5 1 | | 13 12 | | 2 | 14 | | 3 | 3 |
|---|---|---|-----|---|-------|---|---|----|---|---|---|
| | | | 2 | 1 | 1 | 3 | 2 | 1 | | | |
| | | | | | | | | | | | |
| (|) | Ç |) | 1 | 0 | 1 | 1 | , | 1 | 3 | 3 |
| | 2 | 2 | 1 | 1 | 1 | 2 | (| 6 | (|) | |

Note: Do not give children then answer below.

Who's yellow and square and lives under the sea? Sponge Bob Square Pants



| Component | Math |
|---------------|------------------|
| Grade Level: | First Grade |
| Lesson Title: | Decoder Clues #2 |
| Focus: | Subtraction |

| Materials: | | |
|--------------|--|--|
| White boards | Activity at the end of the lesson plan | |
| Crayolas | | |
| Socks | | |

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about subtraction? Give a number sentence that gives a subtraction problem. Tell the story that goes with this number sentence. Share with a peer. Do the same thing all over again. What does the word difference mean? In your number sentence, which number is the minuend? Which is the subtrahend?

Problem of the Day

Which of the following numbers is an odd number? Explain how you know.

4, 16, 10, 7

Fact Practice

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

- 1 + 2 = 3
- 2 + 1 = 3
- 3 2 = 1
- 3 1 = 2

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

The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2=1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5^{th} day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the

*Activity → Teachable Moment(s) throughout

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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



correct response.

Today you will introduce this activity and begin with the Fact Family of 4, 8, and 12. Have students write the entire Fact Family on the white board.

4 + 8 = 12

8 + 4 = 12

12 - 4 = 8

12 - 8 = 4

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 4, 8 and 12. 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: difference

Description: The term difference is the word we use to describe the answer to a subtraction problem. The word is difference because it is very descriptive of the operation of subtraction. You start with a total, take some items away, and what you have left is the difference. Look at this problem: 7-5 = 2. The difference is 2.

Review the entry in your Vocabulary Notebook for the word difference. Share it with a friend.

Vocabulary Notebook Sample:

| New Word | My Description | |
|--|---|--|
| difference | In subtraction the amount you have left when you subtract | |
| Personal Connection | Drawing | |
| The difference of 12 – 4 is 8. In other words, 12 is 4 more than 8 or 8 more than 4. | 12-4-8 | |

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 Subtraction

Subtraction

Subtraction is a math operation that begins with a total number and then removes part of that total. The difference is what is left AFTER you have removed a certain number of objects. If you start with 9 happy faces and you remove 6 happy faces (the number being placed in the second box, the subtraction problem will tell you how many are left in the first box.

| $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ | $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ |
|---|---|
| \rightarrow | \odot |
| $(\bigcirc \bigcirc \bigcirc \bigcirc)$ $\bigcirc \rightarrow$ | |
| \downarrow | |
| $\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc$ | |

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



The problem is written: 9 - 6 = 3 or

9 <u>-6</u>

Subtraction is the reciprocal of addition. Instead of trying to find the total, you know the total and are trying to find the difference in the total if you remove several of the objects from the group.

Review several subtraction problems with the students. Have them write them on a white board while you write them on chart paper or a large white board. Work through the process, reminding students of the number line and the Post-Its.

Explain the today the subtraction problems will give them the clues they need to find an answer to a riddle.

Decoder Clues

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a Decoder Clues problem sheet and white boards.
- 3. Working together, pairs complete each of the problems.
- 4. When the problems are completed, pair should take the letter of the problem and plug the letters into the riddle card.
- 5. If the problems were completed correctly, the answer to the riddle will be obvious. (Not all letters may be used in the answer).

Closing

Review

Say:

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

Debrief

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

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

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

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



1st Grade Decoder Clues

| R | E | Р | V | L |
|-----------------|-----------------|------------|------------------|------------|
| | | | | |
| | | | | |
| 8 | 9 | 6 | 10 | 9 |
| <u>- 7</u> | <u>- 6</u> | <u>-1</u> | 10 <u>- 2</u> | <u>-2</u> |
| | | | | |
| S | В | Т | Р | Q |
| | | | | |
| | | | | |
| 9 | 8 | 10 | 7 | 11 |
| <u>-9</u> | <u>- 4</u> | <u>-4</u> | <u>-5</u> | <u>-2</u> |
| | | | | |
| 0 | U | N | Α | G |
| | | | | |
| | | | | |
| 18 <u>-5</u> | 12 <u>-2</u> | 15 | 14 <u>- 3</u> | 17 |
| <u>-5</u> | <u>-2</u> | <u>- 3</u> | <u>- 3</u> | <u>- 3</u> |
| | | | | |
| | | | | |



Riddle for Day #8

| 0 | 9 | 10 | 11 | 1 | 3 |
|---|----|----|----|---|---|
| | | | | | |
| | 13 | 8 | 11 | 7 | |

Note: Do not give students the answer to the riddle listed below.

Two common shapes: Oval and Square



| Component | Math |
|---------------|---------------|
| Grade Level: | First Grade |
| Lesson Title: | Add 'Em Up #1 |
| Focus: | Addition |

Materials:White boards

Activity at the end of the lesson plan

Crayolas

Socks (for erasers)

Opening

State the objective

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

Focus Student's Prior Knowledge

What do you know about addition? What do you call an answer to an addition problem? How many numbers can you add together in an addition problem? (unlimited). What is the opposite of addition? When you add do you end up with more than you started with or less than you started with? Give an example of an addition problem.

Content (the "Meat")

Problem of the Day

Draw a clock to show what it looks like when you go to lunch at 11:30.

Fact Practice

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

- 1 + 2 = 3
- 2 + 1 = 3
- 3 2 = 1
- 3 1 = 2

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

The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2=1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the 5^{th} day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.

Today you will introduce this activity and begin with the Fact Family of 5, 8 and 13. 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

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

Take advantage of any teachable moments.

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

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



5 + 8 = 13

8 + 5 = 13

13 - 8 = 5

13 - 5 = 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 5, 8, and 13.

Math Vocabulary

Word for Today: addend

Description: The term addend is a word that we use to describe the numbers that we add together in an addition problem. In the problem 5 + 6 = 11, 5 and 6 are the addends. What are the addends in these two problems: 3 + 2 = 5 or 6 + 3 = 9.

Have children review the Vocabulary notebook for the word addend.

Vocabulary Notebook Sample:

| New Word | My Description |
|---|---|
| addend | The two or more numbers that you add together are the addends |
| Personal Connection | Drawing |
| In the number sentence 6 + 4 = 10, the 6 and the 4 are addends. That is how old I am. | 6+4 |

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 Addition

Addition

Sometimes when we add we have numbers that have more than one digit. We can add 2 digit numbers, for example:

Students will add the two digits in the ones or units place, write the total underneath it, and the add the 2 digits that are in the tens place and write the answer or sum underneath the tens place. In the problem above, the answer or sum is 53.

Work through 8 - 10 problems with the children. **BE SURE** that neither the ones or the tens add up to more than 9. This is a lesson for another day.

After working through the problems with the students and you are comfortable that they can move forward on their own, distribute the game.

Add 'Em Up

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.



Directions:

- 1. Divide students into pairs.
- 2. Give each pair an Add 'Em Up Game card and white boards. If you want to use the Game card more than once, either laminate or place in a sheet protector.
- 3. Working together the pair is to find the sum of each of the problems and then write the answer underneath the problem.
- 4. When all groups are finished, you will have them find the magic number by reading the clues provided and the pairs will cross out and eliminate answers until they have only one left, the Magic Number. There will be a different Magic Number for day 9 and day 10.

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

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 Add 'Em Up

| 21 | 32 | 31 | 10 |
|-------------|-------------|-------------|-------------|
| <u>+ 18</u> | <u>+ 16</u> | <u>+ 24</u> | <u>+ 17</u> |
| 17 | 25 | 62 | 22 |
| <u>+ 21</u> | <u>+ 31</u> | <u>+ 13</u> | <u>+ 43</u> |
| 81 | 54 | 19 | 42 |
| + 14 | <u>+ 23</u> | <u>+ 40</u> | <u>+ 37</u> |



Day # 9 Clues.

It is not 56. Cross it out.
It is not 95. Cross it out.
It is not 48. Cross it out.
It is not 79. Cross it out.
It is not 65. Cross it out.
It is not 55. Cross it out.
It is not 38. Cross it out.
It is not 39. Cross it out.
It is not 59. Cross it out.
It is not 77. Cross it out.
It is not 27. Cross it out.

What is the Magic Number? 75



| Component | Math |
|---------------|---------------|
| Grade Level: | First Grade |
| Lesson Title: | Add 'Em Up #2 |
| Focus: | Addition |

Materials:

White boards

Activity at the end of the lesson plan

Crayolas

Socks (use as erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about addition when there are two digits in the addends? Where do you start your adding? (right of the number moving left) What do you do with sum of the digits in the ones column? What do you add next? Where do you put that sum? How do you read the number?

Content (the "Meat")

Problem of the Day

Look around the classroom. Name three things that are circles.

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, 8, and 14.

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

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



Have students write the entire Fact Family on the white board.

6 + 8 = 14

8 + 6 = 14

14 - 6 = 8

14 - 8 = 6

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 6, 8, and 14.

Math Vocabulary

Word for today: plus

Description: Plus is a term we use in a addition problem. It tells you to combine 2 or more amounts to find a total. When you plus something, you add things together. Plus is a word that means adding something.

Review the entry for the word plus that is in your Vocabulary notebook.

Vocabulary Notebook Sample:

| New Word | My Description |
|--|----------------------------|
| plus | plus means to add together |
| Personal Connection | Drawing |
| For my collection I have 3 stamps plus the 2 new ones I got today. | 3+2=5 |

It is important to review academic math vocabulary often throughout the day.

Complete the Vocabulary

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 Addition

Addition

Sometimes when we add we have numbers that have more than one digit. We can add 2 digit numbers, for example:

Students will add the two digits in the ones or units place, write the total underneath it, and the add the 2 digits that are in the tens place and write the answer or sum underneath the tens place. In the problem above, the answer or sum is 53.

Work through 8 - 10 problems with the children. **BE SURE** that neither the ones or the tens add up to more than 9. This is a lesson for another day.

After working through the problems with the students and you are comfortable that they can move forward on their own, distribute the game.

Add 'Em Up

Directions:

- 1. Divide students into pairs.
- 2. Give each pair an Add 'Em Up Game card and white boards. If you want to use the

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.



Game card more than once, either laminate or place in a sheet protector.

- 3. Working together the pair is to find the sum of each of the problems and then write the answer underneath the problem.
- 4. When all groups are finished, you will have them find the magic number by reading the clues provided and the pairs will cross out and eliminate answers until they have only one left, the Magic Number. There is a different Magic Number for today.

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

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 Add 'Em Up

| 21 | 32 | 31 | 10 |
|-------------|-------------|-------------|-------------|
| + 18 | <u>+ 16</u> | <u>+ 24</u> | <u>+ 17</u> |
| 17 | 25 | 62 | 22 |
| <u>+ 21</u> | <u>+ 31</u> | <u>+ 13</u> | <u>+ 43</u> |
| 81 | 54 | 19 | 42 |
| <u>+ 14</u> | + 23 | <u>+ 40</u> | <u>+ 37</u> |



Day # 10 Clues

It is not 79. Cross it out. It is not 65. Cross it out. It is not 39. Cross it out. It is not 59. Cross it out. It is not 77. Cross it out. It is not 56. Cross it out. It is not 95. Cross it out. It is not 75. Cross it out. It is not 55. Cross it out. It is not 38. Cross it out. It is not 48. Cross it out.

What is the Magic Number? 27



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

Materials:

White boards

Materials for games played the past 10 days

Crayolas

Socks (use for erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

Ask children what they know about addition and subtraction. Ask them to share what they do to write number sentences? Ask them about story problems and how they connect to number sentences?

Content (the "Meat")

Problem of the Day

Write a number sentence that has a sum of 8. Use picture, numbers, and words to show 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 5^{th} day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.

Today you will introduce this activity and begin with the Fact Family of 7, 8, and 15. Have students write the entire Fact Family on the white board.

7 + 8 = 15

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

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



8 + 7 = 15

15 - 7 = 8

15 - 8 = 7

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times.

Remember that today they are only doing the Fact Family of 7, 8 and 15.

Activity

Today is a review day. Students should select from the following list of activities:

This Is The Sum What's The Difference? What's My Number? Decoder Clues Add 'Em Up Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

| osing |
|-------|
| |
| |
| |

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.