

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

| Materials: | |
|--------------|--|
| White boards | |
| Crayolas | |
| Socks | |

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

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

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

Content (the "Meat")

Problem of the Day

Count the happy faces. How did you solve this problem?

00 00 00 00 00 00 00

Fact Practice

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

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

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

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

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

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



Today you will introduce this activity and begin with the Fact Family of 10, 10, and 20. Have students write the entire Fact Family on the white board.

10 + 10 = 20

10 + 10 = 20

20 - 10 = 10

20 - 10 = 10

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 10, 10 and 20.

Math Vocabulary

Word for today: fact family

Description: We have been doing a lot of work with fact families. Fact families are 3 numbers that go together in addition and subtraction problems. It is important to remember which numbers have which relationships so you can easily do math problems. A fact family would be 3, 2, and 5; or 6, 7, and 13, as well as many others.

Vocabulary Notebook Sample:

| New Word | My Description | |
|---|--|--|
| fact family | 3 numbers that are related in addition and subtraction | |
| Personal Connection | Drawing | |
| I know that 3, 4, and 7 are in a fact family. | 3 + 4 = 7 $4 + 3 = 7$ $7 - 3 = 4$ | |
| | 7 – 4 = 3 | |

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

Activity

Fun Facts!

This activity was worked on yesterday. Ask students what they learned about playing the game that is helpful. Have students share strategies. Ask students to work in a different pairing today.

Fun Facts!

This activity will give students practice solving problems and also creating a message **Directions**:

- 1. Divide students into pairs or trios.
- 2. Give each pair or trio a deck Fun Fact? Cards and a Game Board.
- 3. Shuffle cards and place them face down next to the game board.
- 4. Player 1 draws a card completes the problem, locates the answer on the game board and writes the letter from his/her card under the answer.
- 5. Player 2 repeats the process.
- 6. When all cards are turned and answers found, then students will read the Fun Fact!

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



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

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. (Aha!)



Fun Facts

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



| 67 M | 26 y | 53 c | 45 v |
|---------|---------|----------------|----------------|
| 32 | 70 | 30 | 55 |
| i | е | е | k |
| 74 | 54 | 60 | 71 |
| 0 | I | е | S |
| 90 | 64 | 31 | 43 |
| M | I | u | 0 |

Answer Card:

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

| l can' | t believ | e you k | new | | | | | | | _ | | |
|--------|----------|---------|------------|----|----|----|----|----|----|----|----|---|
| | | · | | | 64 | 54 | 43 | 45 | 60 | | | |
| | | | | | | | | | | | | ! |
| 67 | 32 | 53 | 5 5 | 70 | 26 | | 90 | 74 | 31 | 71 | 30 | |



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

| Materials: | |
|--------------|---|
| White boards | Fun Fact Game Board, Cards, and Answer Card |
| 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.

Focus Student's Prior Knowledge

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

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

| Content (t | he "Meat") |
|------------|------------|
|------------|------------|

Problem of the Day

Look at the following number sentences. Tell which one does not belong to the family.

| 2 | | ^ | | г |
|----|---|----------|---|----|
| ۲. | _ | • | _ | רי |
| J | _ | _ | _ | · |

$$5 - 3 = 2$$

$$2 + 3 = 5$$

$$5 - 2 = 3$$

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".

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

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



The 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 9, 10, and 19 Have students write the entire Fact Family on the white board.

$$9 + 10 = 19$$

10 + 9 = 19

19 - 9 = 10

19 - 10 = 9

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 9, 10, and 19.

Math Vocabulary

Word for Today: least

Least is a term that we use to describe a numeral that has a value that is less than another numeral. For example 7 is less than 9. So if you were asked "Which number is the least, 7 or 9?" the answer would be 7 because it represents the least value. We can also show least by using the less than symbol <.

Have children complete the Vocabulary notebook for the word "least".

Vocabulary Notebook Sample:

| New Word | My Description | |
|--------------------------------|---|--|
| least | the smallest number when you are looking at two or more numbers | |
| Personal Connection | Drawing | |
| Which number is least, 9 or 3? | 7<10 | |

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

Complete the Vocabulary notebook for each word.

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

Vocabulary Notebooks can be made from ½ of a

composition book.

Activity

Taking The Prize!

This activity will give students practice solving problems and also creating a message. **Directions:**

- 1. Divide students into pairs or trios.
- 2. Give each pair or trio a deck Fun Fact cards and a Game Board.
- 3. Shuffle cards and place them face down next to the game board.
- 4. Player 1 draws a card completes the problem, locates the answer on the game board and writes the letter from his/her card under the answer.
- 5. Player 2 repeats the process.
- 6. When all cards are turned and answers found, then students will read the Fun Fact!

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



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

Reflection (Confirm, Tweak, Aha!)

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



Fun Facts

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| 65 | 47 | 54 | 62 |
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| 67 | 26 | 53 | 45 |
|----|----|----|----|
| a | t | е | t |
| 32 | 70 | 30 | 55 |
| h | е | W | h |
| 74 | 54 | 60 | 71 |
| 0 | | е | t |
| 90 | 64 | 31 | 43 |
| h | į | n | g |

Answer Card:

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

| I can't | believe I | | | | | | | | | |
|---------|-----------|----|------|----|----|----|----|----|----|---|
| | | 6 | 7 26 | 53 | 45 | 32 | 70 | | | |
| | | | | | | | | | | ! |
| 30 | 55 | 74 | 54 | 60 | 71 | 90 | 64 | 31 | 43 | _ |



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

Materials:

White boards decks of cards with face cards and jokers removed

Crayolas Taking the Prize

Socks Beans or other game tokens

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

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

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

17

<u>-8</u>

C

Content (the "Meat")

Problem of the Day

You have two nickels. Do you have enough money to buy a piece of candy that costs 10¢? 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".

*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 7, 8 and 15. Have students write the entire Fact Family on the white board.

7 + 8 = 15

8 + 7 = 15

15 - 7 = 8

15 - 8 = 7

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 7, 8 and 15.

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

Math Vocabulary

Word for Today: ones

Description: Ones is a term we use to describe place value. We only have 10 numerals: 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. We can arrange these digits in a variety of ways and the "place" that the digit is in determines its value. For example in the number 2, we know that we would have on 2 items. However, in the numberal 24, we know that the 2 = 20, that's because it is in the 10's place, and we have 4 ones.

Complete an entry for coin in your Vocabulary Notebook.

Vocabulary Notebook Sample:

| New Word | My Description |
|---|--|
| ones | how you count when you say 1, 2, 3, 4, and so on; ones place captures this count |
| Personal Connection | Drawing |
| What number is in the ones place in this number $64\underline{7}$? | 647 |

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 Taking the Prize

This activity was worked on yesterday. Ask students what they learned about playing the game that is helpful. Have students share strategies. Ask students to work in a different pairing today.

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

Taking the Prize!



Students in 1st grade need to practice addition and subtraction facts to automaticity. We have been working on Fact Families. This activity will give students more practice time.

Taking the Prize

Directions:

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

| | Closing |
|--|------------|
| | Review |
| Say: | |
| Please recap what we did today. | |
| Did we achieve our objectives? | |
| | D. I. J. C |
| | Debrief |
| What did you like about what we did today in math? | |
| How can you use the information from today in school ton | norrow? |

Reflection (Confirm, Tweak, Aha!)

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



Taking The Prize

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



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



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



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

Materials:

White boards Taking the Prize Game Board and Cards

Crayolas Beans or other game tokens

Socks

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

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

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing) Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers (addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students give you in both a horizontal (13 - 6 = 7) and vertical manner

13

-6

-

Content (the "Meat")

Problem of the Day

I am a shape which has three corners. What am I?

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".

*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 7, 7, and 14. Have students write the entire Fact Family on the white board.

7 + 7 = 14

7 + 7 = 14

14 - 7 = 7

14 - 7 = 7

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 7, 7, and 14. Share with students that this fact is a double—the addends are the same.

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

Math Vocabulary

Word for Today: penny

Practice this Penny Chant with the students until they can say it on their own. Then have them draw 5 pennies.

Penny Chant

Penny, penny, Easily spent Copper brown

And worth one cent

Have children complete the Vocabulary notebook.

Vocabulary Notebook Sample:

| New Word | My Description |
|---|------------------------------------|
| penny | U.S. coin that is valued at 1 cent |
| Personal Connection | Drawing |
| I had only one penny left after I paid for the candy bar. | D350 |

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

Taking the Prize!

Students in 1st grade need to practice addition and subtraction facts to automaticity. We have been working on Fact Families. This activity will give students more practice time.

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



Taking the Prize Directions:

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

in the "When Homework Is Complete" center.

Closing

Review

Say:

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

Debrief

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

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

What is a cylinder?

Where can you see them in the world?

Reflection (Confirm, Tweak, Aha!)

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



Taking The Prize

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



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



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



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

| Materials: | |
|--------------|---|
| White boards | Say What Game Board, Cards, and Answer Card |
| Crayolas | |
| Socks | |

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

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

What are the common coins used in the United States?

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

Content (the "Meat")

Problem of the Day

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

Fact Practice

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

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

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



through his/her cards (of course we hope they remember without looking) and gives the correct response.

Today you will introduce this activity and begin with the Fact Family of 9, 9, and 18 (a double)

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

9 + 9 = 18

9 + 9 = 18

18 - 9 = 9

18 - 9 = 9

Bring two students up to practice the 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 9, 9, and 18. Ask students to give you examples of other doubles. Ask students to tell how doubles are different than other fact families.

Math Vocabulary

Word for Today: nickel

Practice this Nickel Chant with the students. Then have them draw 5 nickels (this equals a quarter—count by 5's)

Nickel Chant

Nickel, nickel Thick and fat You're worth five cents I know that!

Vocabulary Notebook Sample:

| New Word | My Description |
|-------------------------------|------------------------|
| nickel | A coin worth 5 pennies |
| Personal Connection | Drawing |
| I have a nickel in my pocket. | |
| Λot | ivity |

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

Say What? (Like a riddle)

This activity was worked on yesterday. Ask students what they learned about playing the game that is helpful. Have students share strategies. Ask students to work in a different pairing today.

Say What?

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



This activity will give students practice solving problems and also creating a message

Say What?

Directions:

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

Review

Say:

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

Debrief

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

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

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

Reflection (Confirm, Tweak, Aha!)

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



Say What?

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

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

Answer Card:





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

| Materials: | |
|--------------|--|
| White boards | |
| Crayolas | |
| Socks | |

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

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

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

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

Content (the "Meat")

Problem of the Day

Is it possible or impossible for there to be green dogs on the street tomorrow? Tell how 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

*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.



correct response.

Today you will introduce this activity and begin with the Fact Family of 8, 9 and 17 Have students write the entire Fact Family on the white board.

8 + 9 = 17

9 + 8 = 17

17 - 8 = 9

17 - 9 = 8

Bring two students up to practice the 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, 9, and 17.

Math Vocabulary

Word for Today: quarter

Practice this Quarter Chant with the students. Then have students draw four quarters which is worth \$1.00

Quarter Chant

Quarter, quarter Big and bold

You're worth twenty-five

I am told.

Have children create an entry in the Vocabulary Notebook for the word quarter.

Vocabulary Notebook Sample:

| New Word | My Description |
|-------------------------------------|---------------------------------|
| quarter | An American coin worth 25 cents |
| Personal Connection | Drawing |
| I was given a quarter when I lost r | my tooth. |

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

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

right angle, multiple students

acting out an equation).

Activity Say What? (Like a riddle)

This activity will give students practice solving problems and also creating a message.

Say What?

Directions:

- 1. Divide students into pairs or trios.
- 2. Give each pair or trio a deck of Say What? cards, Game Board and Answer Card.
- 3. Shuffle cards and place them face down next to the game board.
- 4. Player 1 draws a card completes the problem, locates the answer on the game board and writes the letter from his/her card on the Answer Card above the number.

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



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

| | Closing | |
|---|---------|--|
| | Review | |
| Say: | | |
| Please recap what we did today. | | |
| Did we achieve our objectives? | | |
| | | |
| | Debrief | |
| What did you like about today's lesson? | | |

Reflection (Confirm, Tweak, Aha!)

What is one key learning you had today in math?

1. Ask students to think about what they did today in math.

How can you use the information from today during class tomorrow?

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



Say What?

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

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

Answer Card:

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



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

Materials:

White boards pinto beans, pink beans, lima beans

Crayolas Fantastic Fun Game Board

Socks

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

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

Addition and subtraction is really about understanding counting both forward (increasing) and backward (decreasing)
Ask student volunteers for a number sentence. Write it on the board and discuss the name of each of the numbers
(addends/sums, or minuend, subtrahend, and difference), the operations signs (+ and -) and also the equals sign which
can be written = in a horizontal problem, and ______ (the underline) in a vertical problem. Write the problems students
give you in both a horizontal (6 + 5 = 11) and vertical manner

6

+5

11

Content (the "Meat")

Problem of the Day

If you have 4 cookies and you want to share them with your best friend so you each have the same number, how many will you each have?

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, 9, and 15. Have students write the entire Fact Family on the white board.

6 + 9 = 15

9 + 6 = 15

15 - 6 = 9

15 - 9 = 6

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 6, 9 and 15.

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

Math Vocabulary

Word for Today: coins

Description: Coins is a term that we use to describe all of the different metal money that there is, including pennies, nickels, dimes, quarters, half dollars, and silver dollars. All of these are coins rather than paper money. Almost every money system in the world has a combination of coins and paper money.

In your Vocabulary Notebook create the entry for the word "coins" and with a friend review and be sure that it captures your understanding of the word.

Vocabulary Notebook Sample:

| New Word | My Description |
|---|--|
| coins | U.S. coins are pennies, nickels, dimes, and quarters |
| Personal Connection | Drawing |
| I have five coins, 2 quarters, 1 nickel, 1 dime, and 1 penny. | |

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 Fantastic Fun!

This activity was worked on yesterday. Ask students what they learned about playing the game that is helpful. Have students share strategies. Ask students to work in a different pairing today.

Fantastic Fun!

Students in 1st grade need to practice addition and subtraction facts to automaticity. We have been working on Fact Families. This activity will give students more practice time.

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



Directions:

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

| | | Closin |
|--|--|--------|
| | | |

Review

Say:

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

Debrief

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

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

What are the names of the coins we use?

How many pennies are there in a dime?

Reflection (Confirm, Tweak, Aha!)

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



Fantastic Fun!

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



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



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



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

| Materials: | | |
|--------------|--------------------------------|--|
| White boards | Round 'Em Game Board and Cards | |
| 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 rounding number?

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

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

Content (the "Meat")

Problem of the Day

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

Fact Practice

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

- 1 + 2 = 3
- 2 + 1 = 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

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

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



students every day. On the 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, 8 and 16. Have students write the entire Fact Family on the white board.

8 + 8 = 16

8 + 8 = 16

16 - 8 = 8

16 - 8 = 8

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 8, 8, and 16.

Math Vocabulary

Word for today: tens

Description: Tens is a term we use to describe a place where a numeral can be that values the numeral at 10. When we count: 10, 20, 30, 40, 50, 60, 70, 80, and 90, we have the numerals in the 10s place (except of course the 0). By being in the 10s place we understand that it is more than ones. When you think of money and dime or 10¢ is the same as 10 pennies.

Create an entry in your Vocabulary Notebook for the word tens.

Vocabulary Notebook Sample:

| New Word | My Description | |
|----------------------------|---------------------------------------|--|
| tens | Counting by numbers that are 10 apart | |
| Personal Connection | Drawing | |
| I can count by 10s to 100. | 10 20, 30, 40, 50, 60 | |

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 Round 'Em Targets

This activity was worked on yesterday. Ask students what they learned about playing the game that is helpful. Have students share strategies. Ask students to work in a different pairing today.

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

Round 'Em Targets

It is important that children learn about rounding numbers, especially if they are going to do effective mental math. The rules for rounding are simple: if the number is or ends in 0, 1, 2, 3, or 4, the number rounds down; and if the number is 5, 6, 7, 8, or 9, then the number is rounded up to the next ten.

Round 'Em Targets



Directions:

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

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

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

| 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 easy about rounding numbers? What is difficult? | |

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



Round 'Em Targets

| 20 | 30 | 40 | 50 | 60 |
|----|----|----|----|----|
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| 23 | 27 | 29 | 21 | 25 |
|----|----|----|----|----|
| 34 | 36 | 38 | 31 | 33 |
| 43 | 49 | 47 | 42 | 48 |
| 53 | 57 | 59 | 51 | 54 |
| 17 | 22 | 19 | 18 | 24 |
| 32 | 33 | 37 | 39 | 35 |
| 42 | 46 | 41 | 44 | 45 |
| 52 | 56 | 61 | 64 | 56 |



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

| Materials: | |
|--------------|--|
| White boards | |
| Crayolas | |
| Socks | |

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

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

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

Content (the "Meat")

Problem of the Day

Which of these boxes has the fewest circles?

| A A •• A • | •••• 🛦 🛦 |
|--------------------------|----------|
| • 🛦 🛦 🛦 • | |

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

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

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



students every day. On the 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: dime

Practice this Dime Chant with the students. Then have students draw 10 dimes (count by 10s to 100 or \$1.00)

Dime Chant

Dime, dime

Little and thin

I remember

You're worth ten.

Have children complete the vocabulary notebook for the word equal.

Vocabulary Notebook Sample:

| New Word | My Description |
|-----------------------------|--|
| dime | A dime has a value of 10 cents or 10 pennies |
| Personal Connection | Drawing |
| I have a dime in my pocket. | CH SCHOOL TO S |
| | |

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 Round 'Em Targets

It is important that children learn about rounding numbers, especially if they are going to do effective mental math. The rules for rounding are simple: if the number is or ends in 0, 1, 2, 3, or 4, the number round down; and if the number is 5, 6, 7, 8, or 9, then the number is rounded up to the next ten.

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



Round 'Em Targets

Directions:

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

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

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

| Closing |
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Review

Say:

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

Debrief

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

What would you like to do more of next time?

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

Where can you find those shapes in the world?

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



Round 'Em Targets

| 20 | 30 | 40 | 50 | 60 |
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| 23 | 27 | 29 | 21 | 25 |
|----|------------|----|----|------------|
| 34 | 36 | 38 | 31 | 33 |
| 43 | 49 | 47 | 42 | 48 |
| 53 | 57 | 59 | 51 | 54 |
| 16 | 22 | 19 | 18 | 21 |
| 32 | 2 3 | 38 | 39 | 35 |
| 43 | 36 | 41 | 44 | 46 |
| 51 | 56 | 61 | 64 | 5 9 |



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

Materials:

White boards Fantastic Fun Game Board and Cards

Cravolas Beans or other markers

Socks

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

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

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

5

<u>+4</u>

g

Content (the "Meat") Problem of the Day *Activity > Teachable Write a number sentence to explain the following picture. How did you know what to write? Moment(s) *throughout* \odot \odot \odot \odot During the lesson check in with students repeatedly. \odot Check in about what is happening and what they are **Fact Practice** thinking. Fact Practice for 1st grade is looking at number families, so you are looking at both addition Take advantage of any and subtraction. The key is for children to learn that numbers have a relationship with one teachable moments. another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) Stop the class and focus on a student's key learning or They will write the problem in four ways. 1 + 2 = 3understanding. Ask open-2 + 1 = 3ended auestions to determine what the rest of 3 - 2 = 1the 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 6, 8 and 14. 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.

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

Math Vocabulary

Word for Today: cent

Description: The term cent is used to describe a coin and its value. Everything begins with the value of one cent or 1¢ or 1 penny. A nickel is worth 5¢, which means it is valued at 5 pennies, while a dime or 10¢ is valued at 10 pennies.

Have children complete the Vocabulary notebook.

Vocabulary Notebook Sample:

| New Word | My Description |
|--|--|
| cent | cent is a word that describes the value of coins |
| Personal Connection | Drawing |
| I have 38¢1 quarter, 1 dime and 3 pennies. | ¢ |

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 Fantastic Fun!

Students in 1st grade need to practice addition and subtraction facts to automaticity. We have been working on Fact Families. This activity will give students more practice time.

Fantastic Fun! Directions:

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



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

| | Closing |
|--|---------|
| | Review |
| Say: | |
| Please recap what we did today.Did we achieve our objectives? | |
| | Debrief |
| What did you like about what we did today in math? | |
| What would you like to do more of the next time we do 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. (Aha!)



Fantastic Fun!

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



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



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



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

Materials:
White boards
Crayolas
Socks

Materials for games played the past 10 days

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you like best about working with numbers?

What does it mean to estimate?

What is a coin?

What is a number sentence?

Content (the "Meat")

Problem of the Day

What number is missing from this number sentence that will make it correct?

7 - = 5

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 3

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

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

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

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



Today you will introduce this activity and begin with the Fact Family of 6, 9 and 15. Have students write the entire Fact Family on the white board.

6 + 9 = 15

9 + 6 = 15

15 - 6 = 9

15 - 9 = 6

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

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

Remember that today they are only doing the Fact Family of 6, 9, and 15

Activity

Choice of 5 activities

Over the past 11 days students have played 5 different games. Give students an opportunity to play one of these games.

Fantastic Fun
Taking the Prize
Round 'em Targets
Say What?
Fun Facts!

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

| Closing |
|---------|
|---------|

Review

Say:

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

Debrief

Which of the games did you enjoy playing the most?

What about this game is fun for you?

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