

Component	Math
Grade Level:	First Grade
Lesson Title:	Column Addition #1
Focus:	Addition

Materials:
White boards dice (3 for each pair)
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: John has 3 cookies. His friend gave him two cookies. How many cookies does he have in all?

# Content (the "Meat")

## **Problem of the Day**

I am the answer to the number sentence 3 + 4 = . What number am I? Explain.

#### **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<sup>th</sup> day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.

Today you will introduce this activity and begin with the Fact Family of 4, 9 and 13. Have 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.



4 + 9 = 13

9 + 4 = 13

13 - 4 = 9

13 - 9 = 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, 9 and 13.

## Math Vocabulary

Word for Today: column addition

**Description:** The term column addition refers to the adding of number when you have more than 2 numbers. In a problem it could look like this: 3 + 4 + 2 = 9. Or it could be written this way:

3

4

+2

You add a column in exactly the same way as you add 2 numbers, you just add one or two more numbers. Write several examples of a column addition problem.

Create an entry for "column addition" in your Vocabulary Notebook.

**Vocabulary Notebook Sample:** 

New Word	My Description
column addition	More than two numbers in a vertical space, like a column.
Personal Connection	Drawing
	16
I like to do column addition.	15
	<u>+14</u>

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

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

composition book.

# Activity Column Addition

#### Column Addition

A column of numbers is usually 3 to 4 numbers in a vertical column or a horizontal row. Often times we look at addition of two numbers only, for example 7 + 5 or 23 + 6 and so on. In column addition you have problems that look like this: 4 + 5 + 6 = or

5

<u>+6</u>

When adding a column, it is sometimes easier if you can find two addends that equal 10. For example, 4 + 6 = 10, and 10 + 5 = 15. Sometimes you cannot find a 10, so you add each of the numbers.

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.



## Tri Add

#### **Directions:**

- 1. Divide students into pairs
- 2. Give each pair 3 dice (6-sided or 9 sided), white boards and pens/crayons
- 3. Player 1 rolls the dice and then create an addition problem on his/her white board
- 4. He/she then finds the total and reads the problem aloud to his partner
- 5. Player 2 then repeats the process
- 6. Activity is over when each player has had the opportunity to write 10 equations.

#### Closing

#### Review

## Say:

- Please 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:	Column Addition #2
Focus:	Addition

Materials:

White boards

dice (3 for each pair)

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: Fred has 3 marbles. He won 9 marbles playing marbles. How many marbles does Fred have altogether?

## Content (the "Meat")

## **Problem of the Day**

If it takes 3 ants to carry a cookie. How many ants are needed to carry 3 cookies? Draw a picture to 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 5<sup>th</sup> 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, 6, and 10. Have students write the entire Fact Family on the white board.

4 + 6 = 10

6 + 4 = 10

10 - 4 = 6

10 - 6 = 4

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 4, 6, and 10..

## **Math Vocabulary**

## Word for Today: vertical

**Description:** The word vertical means up and down like you are when you stand up straight. The walls of buildings are vertical, trees are verticals, and columns are vertical as well. The opposite of vertical is horizontal which means like you are when you lay down. In your Vocabulary Notebook create the entry for the word "vertical" and with a friend review

and be sure that it captures your understanding of the word.

**Vocabulary Notebook Sample:** 

New Word	My Description
vertical	A line that goes up and down, like when you are standing.
Personal Connection	Drawing
When I walked down the street I was vertical.	

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

#### **Column Addition**

A column of numbers is usually 3 to 4 numbers in a vertical column or a horizontal row. Often times we look at addition of two numbers only, for example 7 + 5 or 23 + 6 and so on. In column addition you have problems that look like this: 4 + 5 + 6 = or

5 +6

When adding a column, it is sometimes easier if you can find two addends that equal 10. For example, 4 + 6 = 10, and 10 + 5 = 15. Sometimes you cannot find a 10, so you add each of the numbers.

# Tri Add

## **Directions:**

1. Divide students into pairs

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



- 2. Give each pair 3 dice (6-sided or 9 sided), white boards and pens/crayons
- 3. Player 1 rolls the dice and then create an addition problem on his/her white board
- 4. He/she then finds the total and reads the problem aloud to his partner
- 5. Player 2 then repeats the process
- 6. Activity is over when each player has had the opportunity to write 10 equations.

Closing
Review

## Say:

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

#### **Debrief**

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

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

What is a number?

What is a letter?

Are they the same?

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



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

Materials:		
White boards	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 addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: Linda has 7 dolls. She got 2 dolls for her birthday. How many dolls does Linda have all together?

Content (the "Meat")	
Problem of the Day  Dan has a card with 5 + 2 = on it. Fred has a card with 3 + 6 = Whose card has the greater sum? How do you know?	
Fact Practice	(
Fact Practice for 1st grade is looking at number families, so you are looking at both addition	ŀ
and subtraction. The key is for children to learn that numbers have a relationship with one	t
another in adding and subtracting. Fact practice will follow this pattern every day.	١-

They will write the problem in four ways. 1 + 2 = 32 + 1 = 3

3 - 2 = 1

3 - 1 = 2

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

Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)

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<sup>th</sup> 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 = 1

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. Share with students that this fact is a double—the addends are the same.

## **Math Vocabulary**

### Word for Today: horizontal

Description: The term horizontal describes the way you are when you are laying down at night one your bed or when you are laying down on the floor. Roads and streets are horizontal, so are sidewalks and trees when they fall down. Practice drawing a horizontal line. Horizontal is the opposite of vertical.

Have children complete the Vocabulary notebook.

**Vocabulary Notebook Sample:** 

New Word	My Description
horizontal	Horizontal means going across.
	<b>←</b>
Personal Connection	Drawing
At night I sleep in a horizontal position.	<b>←</b>

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

## **Column Addition**

A column of numbers is usually 3 to 4 numbers in a vertical column or a horizontal row. Often times we look at addition of two numbers only, for example 7 + 5 or 23 + 6 and so on. In column addition you have problems that look like this: 4 + 5 + 6 = 0

4 5 +6

When adding a column, it is sometimes easier if you can find two addends that equal 10. For example, 4 + 6 = 10, and 10 + 5 = 15. Sometimes you cannot find a 10, so you add each of the numbers.

## Add 'Em

### **Directions:**

1. Divide students into pairs

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



- 2. Give each pair a Add 'Em Game Board and a deck of cards
- 3. Shuffle the cards
- 4. Player 1 turns up the first card and finds the sum of the three numbers. He/she then locates the answer on the game board and places a marker on it
- 5. Player two then repeats the process
- 6. Game is over when all spots are covered.

Closing	
Review	
Say:	
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 Add 'Em

10	14	15	16	15	11	16
17		12				
12	Draw a	Add "Em				
19	Draw an "Add 'Em" card and calculate the total of the digits.  Find the answer on the game board and place a marker on it.  Students may use a white board to draw the problems so they can count the items.				14	
20					16	
18						13
17	15	18	15	15	16	19



# 1st Grade Add 'Em Cards

5	7	8	9
3	3	4	5
<u>+2</u>	<u>+4</u>	+3	<u>+2</u>
6	8	9	8
2	2	3	7
<u>+7</u>	<u>+1</u>	<u>+4</u>	<u>+2</u>
5	6	7	9
4	5	6	6
<u>+3</u>	<u>+1</u>	<u>+5</u>	<u>+4</u>
6	7	8	9
3	4	5	7
<u>+5</u>	<u>+9</u>	<u>+3</u>	<u>+2</u>
7	8	9	9
2	3	4	8
<u>+4</u>	<u>+6</u>	<u>+2</u>	<u>+1</u>
6	7	8	9
4	5	6	9
<u>+5</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>



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

Materials:

White boards decks of cards with face cards and jokers removed

Crayolas Activity at the end of the lesson plan

Socks (for erasers)

## **Opening**

## State the objective

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

## Gain prior knowledge by asking students the following questions

What do you know about addition? What do the words, "all together" mean and have to do with addition? What do the words sum, addend, and how many have to do with addition? Please write a number sentence that shows this story: Joe has 3 ice cream bars. Frank has 5 ice cream bars. Luis has 2 ice cream bars. How many ice cream bars do the boys have all together?

## Content (the "Meat")

## **Problem of the Day**

Copy and complete the list of numbers. How do you know what the missing numbers are?

5, 10, 15, 20, \_\_\_\_\_, \_\_\_\_, \_\_\_\_

#### **Fact Practice**

Fact Practice for 1<sup>st</sup> 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<sup>th</sup> day, you will utilize all 4 problems from the days before, and

# \*Activity → Teachable Moment(s) throughout

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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



the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.

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

## **Math Vocabulary**

## Word for Today: sum

**Description**: The term sum is the word we use to talk about the answer in an addition problem. When you ad the number 3 + 2 you will have a total of 5. This total is a sum. What is the sum in this problem: 5 + 1 = 6? What is the sum in this problem 3 + 4 + 1 + 8? Complete an entry for sum in your Vocabulary Notebook.

**Vocabulary Notebook Sample:** 

New Word	My Description
sum	Add it up and get the sum
Personal Connection	Drawing
9 is the sum of 6 + 3.	3+6=9

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.

It is important to review academic math vocabulary

often throughout the day.

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

## Activity Addition

### **Column Addition**

A column of numbers is usually 3 to 4 numbers in a vertical column or a horizontal row. Often times we look at addition of two numbers only, for example 7 + 5 or 23 + 6 and so on. In column addition you have problems that look like this: 4 + 5 + 6 = or

5 +6

When adding a column, it is sometimes easier if you can find two addends that equal 10. For example, 4 + 6 = 10, and 10 + 5 = 15. Sometimes you cannot find a 10, so you add each of the numbers.

#### Add 'Em

## **Directions:**

- 1. Divide students into pairs
- 2. Give each pair a Add 'Em Game Board and a deck of cards

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



- 3. Shuffle the cards
- 4. Player 1 turns up the first card and finds the sum of the three numbers. He/she then locates the answer on the game board and places a marker on it
- 5. Player two then repeats the process
- 6. Game is over when all spots are covered.

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

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



# 1st Grade Add 'Em

10	14	15	16	15	11	16
17						12
12	Draw a		Add "Em	l alculate the	total of the	18
19	digits. Find th marker	e answer or on it.	ı the game t	ooard and pl	ace a	14
20		•	a white boai an count the	rd to draw the items.	ne	16
18						13
17	15	18	15	15	16	19



# 1st Grade Add 'Em Cards

5	7	8	9
3	3	4	5
<u>+2</u>	<u>+4</u>	+3	<u>+2</u>
6	8	9	8
2	2	3	7
<u>+7</u>	<u>+1</u>	<u>+4</u>	<u>+2</u>
5	6	7	9
4	5	6	6
<u>+3</u>	<u>+1</u>	<u>+5</u>	<u>+4</u>
6	7	8	9
3	4	5	7
<u>+5</u>	<u>+9</u>	<u>+3</u>	<u>+2</u>
7	8	9	9
2	3	4	8
<u>+4</u>	<u>+6</u>	<u>+2</u>	<u>+1</u>
6	7	8	9
4	5	6	9
<u>+5</u>	<u>+3</u>	<u>+2</u>	<u>+1</u>



<b>Component</b> Math	
Grade Level:	First Grade
Lesson Title:	Story Problems #1
Focus:	Word Problems

Materials:	
White boards	Activity at the end of this 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 do you know about word or story problems? Many times when we do the "problem of the day" we have a story that goes with the math. When we do the math we a number sentence. What are some of the key words that you will find in word problems? How do these words help you know what to do?

Content (the "Meat")		
	Problem of the Day	*/
	Tell whether the number 10 makes each sentence true. Tell how you know for each.	M
	5 + 5 =	Durir
	6 + 3 =	with
	3 + 7 =	Che
	4 + 6 =	happ
	Foot Booking	think

#### **Fact Practice**

Fact Practice for 1<sup>st</sup> 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<sup>th</sup> 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.



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

**Today** you will introduce this activity and begin with the Fact Family of 4, 5, and 9. Have students write the entire Fact Family on the white board.

4 + 5 = 9

5 + 4 = 0

9 - 4 = 5

9 - 5 = 4

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 4, 5 and 9.

## Math Vocabulary

## Word for today: context

**Description**: The term context refers to the words in a story problem that tell you the story that is represented in a number sentence. Context gives you a look at what was going on and hopefully will make the picture of the math more clear in your mind. Context is used to help you understand.

Have children complete the vocabulary notebook for the word context.

Vocabulary Notebook Sample:

New Word	My Description
context	Words that surround other words and help you make sense of it
Personal Connection	Drawing
The story problem is the context for the number sentence 3 + 5 = 8.	eraser 3 + 5 = 8 total in all

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

composition book.

## **Activity Word Problems**

#### **Word Problems:**

A word problem is a story that has math in it. When you hear a story problem you can write a number sentence to represent the math. An example of a story problem follows: Jorge had 7 cookies. His mother gave him 5 more. How many cookies does Jorge have now? A number sentence would look like this: 7 cookies + 5 cookies = 12 cookies. There are clues in the story. Words like now or all together tell us that we will add. If the word problem went like this: Jorge had 7 cookies. His mother ate 5 of them. How many cookies does Jorge have left? would tell us that the number sentence needs to look like this 7 - 5 = 2. When we work with word problems it is important to think about what question we are being asked. This makes it easier to know whether or not we add or subtract.

## **Story Problems Directions:**

Divide students into trios

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



- 2. Give each trio a Word Problem Card and an Answer Board
- 3. Working together, trios read the problem and write a number sentence and solve the problem.
- 4. The trio then looks to the Answer Board to be sure that there is an answer like the one they found.

Activity is complete when all problems have been solved.

_	_	
7.1	ACIN	
	osin	u
	••••	м

Review

## Say:

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

#### **Debrief**

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

What would you like to do more of next time?

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

Where can you find those shapes in the world?

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



## 1st Grade Story Problems Card

There are 3 blue blocks and 5 red blocks. How many blocks are there in all?

Martin has 7 pencils. He gives 2 to a friend. How many pencils does Martin have left?

Joni is the only person swimming in the pool. 4 of her friends join her in the pool. How many people are swimming in the pool?

Ed has 10 cookies. He gives 3 to his teacher. How many does Ed have left?

Annie picked 3 tulips and 6 roses. How many flowers does Annie have all together?

Seth has 3 toy cars. His friend Abel has 7 toy cars. How many cars do they have altogether?

Ellie has 2 dogs. Mary has 5 dogs. How many dogs do they have altogether?

Will has 2 skates. His brother has 6 skates. How many skates do the have together?

Aaron has 2 fish. His brother gets him 5 fish for his birthday. How many fish does Aaron have now?

Nathan has 8 dogs. Tony takes 3 of the dogs on a walk. How many dogs does Nathan have now?

John has 6 green jelly beans, 4 red jelly beans and 2 yellow jelly beans. How many jelly beans does John have altogether?

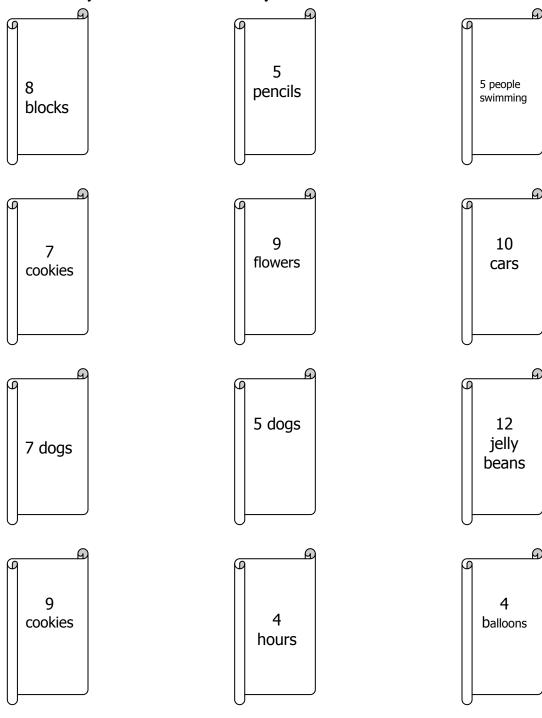
Lori has 3 chocolate chip cookies, 1 sugar cookie, and 5 Snicker Doodles. How many cookies does Lori have altogether?

It took Julia 2 hours to clean her bedroom. It took her 2 hours to finish her homework. How much time has Julia used to complete these two activities?

Lily got 9 balloons for her birthday. 5 of the balloons popped. How many balloons does Lily have left?



1st Grade Story Problems Answer Key





Component	Math
Grade Level:	First Grade
Lesson Title:	Story Problems #2
Focus:	Word Problems

## **Opening**

## State the objective

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

## Gain prior knowledge by asking students the following questions

What do you know about word or story problems? Many times when we do the "problem of the day" we have a story that goes with the math. When we do the math we a number sentence. What are some of the key words that you will find in word problems? How do these words help you know what to do?

## Content (the "Meat")

## **Problem of the Day**

Jill has 10 red crayons and 3 green crayons in a box. She takes a crayon out of the box without looking. Which color is she more likely to pull out? How do you know?

#### **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.

# \*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 5, 6 and 11. Have students write the entire Fact Family on the white board.

5 + 6 = 11

6 + 5 = 11

11 - 5 = 6

11 - 6 = 5

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 5, 6, and 11.

## **Math Vocabulary**

## Word for today: number sentence

**Description:** The term number sentence refers to the problem that we write that demonstrates the math for the story we read. A number sentence can look like this: 4 + 5 = 9. The story might be John has 4 marbles. His mother gives him 5 marbles. How many marbles does John have altogether? Write a number sentence for this story: Judy has 3 flowers. She is given 5 more flowers. How many flowers does she have altogether? Create an entry in your Vocabulary Notebook for the word number sentence.

**Vocabulary Notebook Sample:** 

New Word	My Description
number sentence	Number sentences tell you how numbers are related
Personal Connection	Drawing
If John has 2 pencils and Jill has 3 pencils, they have 5 pencils. This is the number sentence: 2 + 3 = 5	2+3=5

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

Complete the Vocabulary notebook for each word.

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

Vocabulary Notebooks can be made from ½ of a

composition book.

# Activity Word Problems

#### Word Problems:

A word problem is a story that has math in it. When you hear a story problem you can write a number sentence to represent the math. An example of a story problem follows: Jorge had 7 cookies. His mother gave him 5 more. How many cookies does Jorge have now? A number sentence would look like this: 7 cookies + 5 cookies = 12 cookies. There are clues in the story. Words like now or all together tell us that we will add. If the word problem went like this: Jorge had 7 cookies. His mother ate 5 of them. How many cookies does Jorge have left? would tell us that the number sentence needs to look like this 7 - 5 = 2. When we work with word problems it is important to think about what question we are being asked. This makes it easier to know whether or not we add or subtract.

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



## **Story Problems**

#### **Directions:**

- 1. Divide students into trios
- 2. Give each trio a Word Problem Card and an Answer Board
- 3. Working together, trios read the problem and write a number sentence and solve the problem.
- 4. The trio then looks to the Answer Board to be sure that there is an answer like the one they found.
- 5. Activity is complete when all problems have been solved.

<b>^</b> 1		
7 - 1	osin	~
U	USIII	u

#### Review

## Say:

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

#### **Debrief**

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

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

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

Where can you find those shapes in the world?

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



## 1st Grade Story Problems Card

There are 3 blue blocks and 5 red blocks. How many blocks are there in all?

Martin has 7 pencils. He gives 2 to a friend. How many pencils does Martin have left?

Joni is the only person swimming in the pool. 4 of her friends join her in the pool. How many people are swimming in the pool?

Ed has 10 cookies. He gives 3 to his teacher. How many does Ed have left?

Annie picked 3 tulips and 6 roses. How many flowers does Annie have all together?

Seth has 3 toy cars. His friend Abel has 7 toy cars. How many cars do they have altogether?

Ellie has 2 dogs. Mary has 5 dogs. How many dogs do they have altogether?

Will has 2 skates. His brother has 6 skates. How many skates do the have together?

Aaron has 2 fish. His brother gets him 5 fish for his birthday. How many fish does Aaron have now?

Nathan has 8 dogs. Tony takes 3 of the dogs on a walk. How many dogs does Nathan have now?

John has 6 green jelly beans, 4 red jelly beans and 2 yellow jelly beans. How many jelly beans does John have altogether?

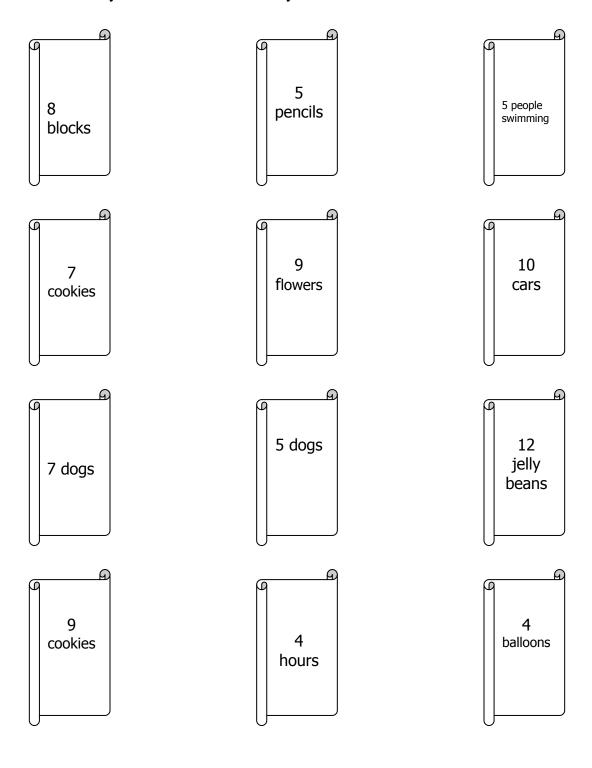
Lori has 3 chocolate chip cookies, 1 sugar cookie, and 5 Snicker Doodles. How many cookies does Lori have altogether?

It took Julia 2 hours to clean her bedroom. It took her 2 hours to finish her homework. How much time has Julia used to complete these two activities?

Lily got 9 balloons for her birthday. 5 of the balloons popped. How many balloons does Lily have left?



# 1st Grade Story Problems Answer Key





Component	Math
Grade Level:	First Grade
Lesson Title:	Number Sentences to Stories #1
Focus:	Word Problems

**Materials:** 

White boards

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 word or story problems? Many times when we do the "problem of the day" we have a story that goes with the math. When we do the math we a number sentence. What are some of the key words that you will find in word problems? How do these words help you know what to do?

## Content (the "Meat")

## **Problem of the Day**

Look at the numbers below. Which is an even number? Explain how you know.

3 17 6 15

## **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<sup>th</sup> 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 5, 7, and 12. Have students write the entire Fact Family on the white board.

5 + 7 = 12

7 + 5 = 12

12 - 5 = 7

12 - 7 = 5

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 85, 7 and 12.

## **Math Vocabulary**

## Word for Today: how many

**Description**: The term how many is used in a word problem to let the reader know that this is asking you to perform a mathematical operation. If it is combined with the word left, reading how many left—this is a clue for you to subtract. If it is combined with the word altogether, then this is a clue for you to add. How many is a question and the others words let you know what kind of an answer is needed.

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

**Vocabulary Notebook Sample:** 

New Word	My Description
how many	Term used in a word problem that lets you know to add
Personal Connection	Drawing
If I have 4 balloons and you have 3 balloons, how many do we have together?	

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

Complete the Vocabulary notebook for each word.

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

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

# Activity Word Problems

#### Word Problems:

A word problem is a story that has math in it. When you hear a story problem you can write a number sentence to represent the math. An example of a story problem follows: Jorge had 7 cookies. His mother gave him 5 more. How many cookies does Jorge have now? A number sentence would look like this: 7 cookies + 5 cookies = 12 cookies. There are clues in the story. Words like now or all together tell us that we will add. If the word problem went like this: Jorge had 7 cookies. His mother ate 5 of them. How many cookies does Jorge have left? would tell us that the number sentence needs to look like this 7 - 5 = 2. When we work with word problems it is important to think about what question we are being asked. This makes it easier to know whether or not we add or subtract.

Today we are going to work on writing stories to go with number sentences. For example if you read the number sentence: 7 - 5 = 2, you would need to make up a story such as, Jorge has 7 balloons. 5 of them popped. How many does he have left? Do several

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



examples with the students on the board.

# Number Sentences to Stories #1 Directions:

- Divide students into trios
- 2. Give each trio a Number Sentence Card
- 3. Together, students work out stories for each of the number sentences that they find on the card.
- 4. Students may write or draw the stories.
- 5. After students have created stories for the 8 number sentences, bring group together to share the stories for the different number sentences.

	Closing			
	Review			
Say:				
Please recap what we did today.				
<ul> <li>Did we achieve our objectives?</li> </ul>				
Debrief				
What did you like about today's lesson?				
How can you use the information from today during clas	ss tomorrow?			

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



1st Grade Number Sentence Cards # 1

$$7 - 3 = 4$$

$$6 + 2 = 8$$

$$7-3=4$$
  $6+2=8$   $4+7=11$   $7-5=2$ 

$$7 - 5 = 2$$

$$10 - 6 = 4$$

$$10 - 6 = 4$$
  $9 - 3 = 6$   $8 - 1 = 7$ 



Component	Math
Grade Level:	First Grade
Lesson Title:	Number Sentences to Stories #2
Focus:	Word Problems

Materials:		
White boards	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 word or story problems? Many times when we do the "problem of the day" we have a story that goes with the math. When we do the math we a number sentence. What are some of the key words that you will find in word problems? How do these words help you know what to do?

## Content (the "Meat")

## **Problem of the Day**

Write a number sentence with a sum of 9. Use pictures, 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<sup>th</sup> 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.

# \*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 + 8 = 13

8 + 5 = 13

13 - 5 = 8

13 - 8 = 5

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 5, 8, and 13. 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: difference

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

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

**Vocabulary Notebook Sample:** 

New Word	My Description
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 Word Problems

A word problem is a story that has math in it. When you hear a story problem you can write a number sentence to represent the math. An example of a story problem follows: Jorge had 7 cookies. His mother gave him 5 more. How many cookies does Jorge have now? A number sentence would look like this: 7 cookies + 5 cookies = 12 cookies. There are clues in the story. Words like now or all together tell us that we will add. If the word problem went like this: Jorge had 7 cookies. His mother ate 5 of them. How many cookies does Jorge have left? would tell us that the number sentence needs to look like this 7 - 5 = 2. When we work with word problems it is important to think about what question we are being asked. This makes it easier to know whether or not we add or subtract.

Today we are going to work on writing stories to go with number sentences. For example if you read the number sentence: 7 - 5 = 2, you would need to make up a story such as, Jorge has 7 balloons. 5 of them popped. How many does he have left? Do several examples with the students on the board.

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



# Number Sentences to Stories #2 Directions:

- 1. Divide students into trios
- 2. Give each trio a Number Sentence Card
- 3. Together, students work out stories for each of the number sentences that they find on the card.
- 4. Students may write or draw the stories.
- 5. After students have created stories for the 8 number sentences, bring group together to share the stories for the different number sentences.

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

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



1st Grade Number Sentence Cards # 2

$$11 + 3 = 14$$

$$6 - 3 = 3$$

$$4 + 2 + 6 = 12$$

$$11 + 3 = 14$$
  $6 - 3 = 3$   $4 + 2 + 6 = 12$   $5 + 4 + 2 = 11$ 

$$8 - 3 = 5$$

$$9 - 5 = 4$$

$$9-5=4$$
  $8+3=11$   $7-2=5$ 

$$7 - 2 = 5$$



Component	Math
Grade Level:	First Grade
Lesson Title:	Add Them Up #1
Focus:	Addition problems

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 4 groups of 4 apples. How many apples are there in all? Use your picture to explain.

#### **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<sup>th</sup> 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.

# \*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.

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.

## **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 Problems**

Sometimes addition problems have more than one digit in the numbers you are adding. For example, a problem might be something like this:

12

+ 7

The story behind the problem might be that Nancy had 12 eggs and then purchased 7 more. How many eggs does she have now?

It is important to learn how to add problems like this.

# Add Them Up

#### **Directions:**

- 1. Divide students in pairs
- 2. Give each pair as set of Add Them Up Cards and Game Board, a white board, pens/crayons
- 3. Shuffle the cards and put them to the right of the game board

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



- 4. Player 1 draws a card, completes the addition and then finds the answer on the Game Board and covers it with a marker
- 5. Player 2 repeats the process
- 6. Game is over when all of the answers are covered.

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

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



# 1st Grade Add Them Up

12	14	15	17	22
<u>+7</u>	<u>+4</u>	<u>+2</u>	<u>+1</u>	<u>+6</u>
24	26	27	31	33
<u>+3</u>	<u>+3</u>	<u>+2</u>	<u>+8</u>	<u>+2</u>
34	37	40	43	45
<u>+5</u>	<u>+ 1</u>	<u>+8</u>	<u>+2</u>	<u>+1</u>
53	52	56	60	61
<u>+5</u>	<u>+3</u>	<u>+1</u>	<u>+4</u>	<u>+7</u>
62	71	72	77	81
<u>+1</u>	<u>+6</u>	<u>+4</u>	<u>+2</u>	<u>+8</u>
84	87	90	91	93
<u>+3</u>	<u>+1</u>	<u>+9</u>	<u>+6</u>	<u>+3</u>



# 1st Grade Add Them Up Game Board

19	39	55	89	18
35	57	87	17	39
64	88	18	38	68
99	28	48	63	97
27	45	77	96	29
29	46	58	76	79



Component	Math
Grade Level:	First Grade
Lesson Title:	Add Them 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? What do you call an answer to an addition problem? How many numbers can you add together in an addition problem? (unlimited). What is the opposite of addition? When you add do you end up with more than you started with or less than you started with?

## Content (the "Meat")

## **Problem of the Day**

Joan has 11 books. She gives 5 to a friend. How many books does she have left?

#### **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<sup>th</sup> 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.

# \*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.

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: minus

**Description:** Minus is a term we use in a subtraction problem. It tells you to take something away from the total. When you minus something, you take away something. Minus is a word that means you are reducing something.

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

## **Vocabulary Notebook Sample:**

		مانمونم المانون
New Word	My Description	right angle, acting out a
minus	Subtraction, take away, difference are terms that go with the word minus which means less that it was to begin with	Vocabulary be made fro composition
Personal Connection	Drawing	
I had twelve rocks and I gave 2 away, so now I have 10. Ten is the difference of 12 minus 2.	12-2=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 Addition

#### **Addition Problems**

Sometimes addition problems have more than one digit in the numbers you are adding. For example, a problem might be something like this:

12 + 7

The story behind the problem might be that Nancy had 12 eggs and then purchased 7 more. How many eggs does she have now?

It is important to learn how to add problems like this.

# Add Them Up

#### **Directions:**

- 1. Divide students in pairs
- 2. Give each pair as set of Add Them Up Cards and Game Board, a white board, pens/crayons
- 3. Shuffle the cards and put them to the right of the game board
- 4. Player 1 draws a card, completes the addition and then finds the answer on the Game

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



Board and covers it with a marker

5. Player 2 repeats the process

6. Game is over when all of the answers are covered.

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

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



# 1st Grade Add Them Up

12	14	15	17	22
<u>+7</u>	<u>+4</u>	<u>+2</u>	<u>+1</u>	<u>+6</u>
24	26	27	31	33
<u>+3</u>	<u>+3</u>	<u>+2</u>	<u>+8</u>	<u>+2</u>
34	37	40	43	45
<u>+5</u>	<u>+ 1</u>	<u>+8</u>	<u>+2</u>	<u>+1</u>
53	52	56	60	61
<u>+5</u>	<u>+3</u>	<u>+1</u>	<u>+4</u>	<u>+7</u>
62	71	72	77	81
<u>+1</u>	<u>+6</u>	<u>+4</u>	<u>+2</u>	<u>+8</u>
84	87	90	91	93
<u>+3</u>	<u>+1</u>	<u>+9</u>	<u>+6</u>	<u>+3</u>



# 1st Grade Add Them Up Game Board

19	39	55	89	18
35	57	87	17	39
64	88	18	38	68
99	28	48	63	97
27	45	77	96	29
29	46	58	76	79



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

## Content (the "Meat")

## **Problem of the Day**

If Joe went to the park at 2:00 and he plays for 2 hours. What time is it when he goes home?

#### **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 6, 8 and 14. Have students write the entire Fact Family on the white board.

6 + 8 = 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.



8 + 6 = 14

14 - 6 = 8

14 - 8 = 6

Bring two students up to practice the conversation.

Try it again with several other pairs of students.

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

Remember that today they are only doing the Fact Family of 6, 8 and 14.

**Activity** 

Today is review day. Students will be able to select from the Fraction Games you played for the last 10 days. Ask students to select from:

Tri Add Add 'Em Story Problems Number Sentence Stories Add Them Up Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

	Closing
	Review
Say:	
Please recap what we did today.	
<ul> <li>Did we achieve our objectives?</li> </ul>	
	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.