

Component	Math
Grade Level:	2 nd Grade
Lesson Title:	What's My Value?
Focus:	Place Value

Materials:

White boards Vocabulary Notebooks Activity at end of lesson plan

Crayolas decks of cards

Socks dice

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about place value? What are the different places that you are familiar with? How does place value affect the value of 9 in these numbers: 9, 791, and 1, 936? What are the different place values in this number: 7,192? Digits can be found in the ones, tens, and hundreds place.

Content (the "Meat")

Problem of the Day

Look at the circles below. Is there a pattern? What or why not?













Fact Practice

Addition War

- Divide students into pairs. Give each pair a deck of cards without face cards and jokers.
- Shuffle the deck and divide the cards evenly between the two players
- On go, the players turn over the cards at the same time
- Students add the 2 numbers that have been turned up
- First person to give the answer either wins the cards because the answer is correct, or has to turn over 2 cards because he/she gave the wrong answer
- At the end of round, students may reshuffle the pile of cards that they have
- Play can continue until one player has all cards or time has called

*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.



Math Vocabulary

Word for Today: place value

Description: The term place value refers to the value of a digit based on whether it is in the ones, tens, or hundreds place. Place value is what allows us to make any number out of ony10 different digits.

Enter the term place value in the Vocabulary Notebook. Share the information with a peer.

Vocabulary Notebook Sample:

New Word	My Description
place value	743 = 700 + 40 +3
Personal Connection	Drawing
I would rather be 6 that 46.	781

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 Place Value

Place Value

Place value determines what the value of a digit is. For example, we only have ten digits: 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. Depending on what comes before or after those numbers determines which place a digit is in. For example, in the number 34 the two digits represent 30 + 4. This is because the 3 is in the tens place, and instead of just thinking of it as 3, we should think of it as 30 not 3. The place values we are going to look at are thousands, hundreds, tens, and ones (or units). In this number:

4,531, the four is in the thousands place, the five is in the hundreds place, the three is in the tens place, and the 1 is in the units place. If we were to write this number in expanded notation it would be written:

4.000 + 500 + 30 + 1.

Write several numbers on the board and ask students to identify which place each digit is in.

Explain to students that in the game today they are to identify the place value of the underlined number.

What's My Value?

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a deck of What's My Value cards and game board.
- 3. Shuffle the cards and place between the pair next to the game board.
- 4. Player 1 draws the first card, identifies which place the underlined number is in and then places that card in the correct column on the What's My Value game board.
- 5. Player 2 continues play in the same way.
- 6. Game is over when all cards are placed in the correct column.

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



Closing

Review

Say:

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

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

What advice would you give to a "new" player getting ready to play this game so he/she could get all the blocks are completed.

Reflection (Confirm, Tweak, Aha!)

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



2nd Grade What's My Value?

Thousands	Hundreds	Tens	Ones (Units)



2nd Grade What's My Value?

7 <u>8</u> 9	<u>2</u> ,490	2 <u>3</u>	<u>7</u> 83
55 <u>2</u>	9,207	8 <u>1</u> 6	<u>6</u> ,534
<u>6</u> 1	2 <u>0</u> 9	38 <u>4</u>	<u>3</u> ,811
53 <u>7</u>	<u>1</u> 25	1 ,4 <u>3</u> 6	<u>7</u> 18
3 <u>6</u> 1	89 <u>2</u>	<u>3</u> 59	<u>5</u> 98
<u>8</u> 13	56 <u>4</u>	2 <u>2</u> 7	<u>5</u> 78
<u>7</u> 24	<u>8</u> 7	89 <u>6</u>	<u>1</u> ,483



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	What's My Value?
Focus:	Place Value

Materials:

White boards Vocabulary Notebooks Decks of cards

Cravolas Dice

Socks Activity at the end of the lesson plan

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about place value? What are the different places that you are familiar with? How does place value affect the value of 6 in these numbers: 64, 796, and 1, 936? What are the different place values in this number: 6,831? Digits can be found in the ones, tens, and hundreds place.

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Content (the "Meat")		
Problem of the Day	*Activity → Teachable Moment(s) throughout	
Add the following numbers. 356 and 247. What will the sum be? What are the steps you will follow?	During the lesson check in with students repeatedly.	
Fact Practice Spokes on a Wheel	Check in about what they are thinking.	
 Divide students into pairs On a white board, student draws a small circle with 9 spokes coming out of it (should look 	Take advantage of any teachable moments.	
like a bicycle tire) 3. Have students choose to put a 6, 7 or 8 in the center circle	Stop the class and focus on a student's key learning or	
 4. Student rolls two dice and adds the pips (dots) 5. Taking this total, student writes a math problem on one of the spokes (eg. 7 is in the circle and students rolls a 3 and 5 which totals 8. The spoke equation would look like 7 + 8 = 15 	understanding. Ask open- ended questions to determine what the rest of	
6. Process continues until all spokes have an equation	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
Math Vocabulary	It is important to review	
Word for Today: Word for Today: place value Description: The term place value refers to the value of a digit based on whether it is in	academic math vocabulary often throughout the day.	



the ones, tens, or hundreds place. Place value is what allows us to make any number out of ony10 different digits.

Enter the term place value in the Vocabulary Notebook. Share the information with a peer.

Vocabulary Notebook Sample:

New Word	My Description
place value	743 = 700 + 40 +3
Personal Connection	Drawing
I would rather be 6 that 46.	781

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 Place Value

Place Value

Place value determines what the value of a digit is. For example, we only have ten digits: 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9. Depending on what comes before or after those numbers determines which place a digit is in. For example, in the number 34 the two digits represent 30 + 4. This is because the 3 is in the tens place, and instead of just thinking of it as 3, we should think of it as 30 not 3. The place values we are going to look at are thousands, hundreds, tens, and ones (or units). In this number:

4,531, the four is in the thousands place, the five is in the hundreds place, the three is in the tens place, and the 1 is in the units place. If we were to write this number in expanded notation it would be written:

4,000 + 500 + 30 + 1.

Write several numbers on the board and ask students to identify which place each digit is in.

Explain to students that in the game today they are to identify the place value of the underlined number.

What's My Value?

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a deck of What's My Value cards and game board.
- 3. Shuffle the cards and place between the pair next to the game board.
- 4. Player 1 draws the first card, identifies which place the underlined number is in and then places that card in the correct column on the What's My Value game board.
- 5. Player 2 continues play in the same way.
- 6. Game is over when all cards are placed in the correct column.

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



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

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

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

Reflection (Confirm, Tweak, Aha!)

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



2nd Grade What's My Value?

Thousands	Hundreds	Tens	Ones (Units)



2nd Grade What's My Value?

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55 <u>2</u>	9,207	8 <u>1</u> 6	<u>6</u> ,534
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53 <u>7</u>	<u>1</u> 25	1 ,4 <u>3</u> 6	<u>7</u> 18
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<u>7</u> 24	<u>8</u> 7	89 <u>6</u>	<u>1</u> ,483



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Comparisons
Focus:	Number

Materials:

White boards Vocabulary Notebooks

Crayolas Socks (erasers for white board)
Cards Activity at the end of the lesson plan

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about comparing numbers? What are some symbols that we use in math to compare numbers? (<, >, =) Why would you need to know how to compare numbers? When you look at the following numbers, what comparison could you make: 571 543?

Content (the "Meat")				
Problem of the Day	*Activity → Teachable Moment(s) <i>throughout</i>			
Joey has 143 cupcakes. Martin has 171 cupcakes. Write a number sentence to show how many cupcakes they have all together.	During the lesson check in with students repeatedly.			
Fore-header 1. Divide students into trios. Give each trio a deck of cards without face cards and jokers. 2. Shuffle the deck and give all of the cards to the referee who will be "judging" the contest 3. On go, players are each handed a card by the referee and WITHOUT looking, put the card face out on his/her forehead 4. The referee adds the two numbers together and states the answer 5. Each player looks at the other person's exposed number and names his/her own number 6. Person who wins (accuracy and time), collects both cards 7. Play continues until all cards are gone. 8. Players can repeat play (if there is another time) with each other so each has an opportunity to be both a player and referee	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.			
Math Vocabulary It is important to review				
Word for Today: compare	academic math vocabulary			



Description: The term compare means to look at two or more numbers and determine if they are equal, larger, or smaller. Compare is an action that identifies the relationship between numbers. We use symbols to make these comparisons: < less than, >greater than, and = equal.

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

Vocabulary Notebook Sample:

New Word	My Description
compare	say how numbers are related
Personal Connection	Drawing
7 > 3.	greater than

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 Comparisons

Comparing Numbers

We can compare numbers by determining if one of the numbers is greater (>), less (<) or = to another number. It is important that students understand how to compare numbers. Ordering numbers means putting the numbers in a particular order. Sometimes the order is from smallest to largest, while others may be from largest to smallest.

Write several sets of numbers on the board or chart paper and work through the comparisons with the students. Also give students the opportunity to order different groups of numbers from both largest to smallest and smallest to largest. Be sure to talk through your own thoughts with the students using the strategy of metacognition to help them understand how to think about a problem.

Comparisons

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a set of Comparisons and order cards and a game board.
- 3. Shuffle the cards and place face down between the students.
- 4. Player 1 draws a card and then places it in the correct column.
- 5. Player 2 continues in the same way.
- 6. Game is over when all cards are played.

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



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

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

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

Reflection (Confirm, Tweak, Aha!)

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



2nd Grade Comparisons and Order

Greater Than >	Less Than <	Equal



2nd Grade Comparisons and Order

74	47	52	53	60	90	85	85
30	29	450	540	67	59	702	720
813	381	520	527	188	563	987	904
671	623	532	549	974	974	878	940
578	573	173	119	189	271	650	671
186	143	520	595	738	766	255	236
671	684	295	213	192	306	192	707
489	113	353	353	287	191	659	213



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Comparisons
Focus:	Number

Materials:White boardsVocabulary NotebooksActivity at the end of the lesson planCrayolasDecks of cardsDiceSocks (use as erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about comparing numbers? What are some symbols that we use in math to compare numbers? (<, >, =) Why would you need to know how to compare numbers? When you look at the following numbers, what comparison could you make: 681 681?

Content (the "Meat")

Problem of the Day

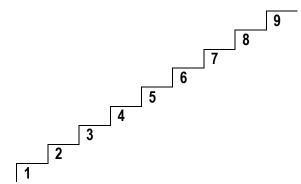
The rule of the table below is to subtract 5. Complete the table.

In	50	45	40	35	30
Out	45	40			

Fact Practice

Addition Ladder

- 1. Give each student a white board (include marker or crayola)
- 2. Student should draw a ladder like the one below



3. Have student roll 2 dice, total the pips and then add that number to each of the numbers in the ladder, writing the sum to the right of the number

*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.



Math Vocabulary

Word for Today: compare

Description: The term compare means to look at two or more numbers and determine if they are equal, larger, or smaller. Compare is an action that identifies the relationship between numbers. We use symbols to make these comparisons: < less than, >greater than, and = equal.

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

Vocabulary Notebook Sample:

New Word	My Description
compare	say how numbers are related
Personal Connection	Drawing
7 > 3.	greater than

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 Comparisons

Comparing Numbers

We can compare numbers by determining if one of the numbers is greater (>), less (<) or = to another number. It is important that students understand how to compare numbers. Ordering numbers means putting the numbers in a particular order. Sometimes the order is from smallest to largest, while others may be from largest to smallest.

Write several sets of numbers on the board or chart paper and work through the comparisons with the students. Also give students the opportunity to order different groups of numbers from both largest to smallest and smallest to largest. Be sure to talk through your own thoughts with the students using the strategy of metacognition to help them understand how to think about a problem.

Comparisons

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a set of Comparisons and order cards and a game board.
- 3. Shuffle the cards and place face down between the students.
- 4. Player 1 draws a card and then places it in the correct column.
- 5. Player 2 continues in the same way.
- 6. Game is over when all cards are played.

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



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

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

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

Reflection (Confirm, Tweak, Aha!)

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



2^{nd} Grade Comparisons and Order

Greater Than >	Less Than <	Equal



2nd Grade Comparisons and Order

74	47	52	53	60	90	85	85
30	29	450	540	67	59	702	720
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671	623	532	549	974	974	878	940
578	573	173	119	189	271	650	671
186	143	520	595	738	766	255	236
671	684	295	213	192	306	192	707
489	113	353	353	287	191	659	213



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Regrouping
Focus:	Addition

Materials:

White boards Vocabulary Notebooks

Crayolas Playing cards

Activity at the end of the lesson plan Socks (use as erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about addition? What is a two digit number? Give several examples of a 2 digit addition problem. What is a 3 digit number? Give several examples of a 3 digit number. What do you do if the sum of one of the columns is more than 10? What is that called? Write a sample addition problem on your white board. Trade white boards with a peer and solve the problem.

Content (the "Meat")	
Problem of the Day	*Activity → Teachable Moment(s) throughout
Arnie wants to buy a cookie for 43ϕ . Draw a picture that shows the coins that he could use to buy the cookie.	During the lesson check in with students repeatedly.
 Fact Practice Target Divide students into trios Each trio needs a deck of cards without face cards and jokers Place the cards face up in a TicTac Toe Grid Turn up a 10th card which will be to the side and becomes the target number (aces count as 1) Each player makes an equation with some or all of the numbers in the grid to equal the target number. Students may add or subtract. Each card may be used only one time in the equation As the cards are being picked up, the player must say the equation aloud—for example if the target card is 10, then I could say 6 + 4 = 10, and pick up the 6 and the 4. After one player finishes his/her turn, then the cards taken are replaced by cards from the remaining deck Player with the cards at the end of the game win 	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.
Math Vocabulary Word for Today: regrouping	It is important to review academic math vocabulary often throughout the day



Description: Regrouping is a term we use to describe a process used in both addition and subtraction when we need to adjust for place value. In addition, we regroup by carrying the digit in the tens place of a sum to the column to the left and then including it in the addition of that column. In this problem, 46 + 78, when you add the 8 and the 6 you get a sum of 14. The 4 stays in the units or ones place, and the 1 (from the 10) is included in the addition of 4 + 7 + 1 for a total of 12. Technically, the 2 goes under the tens column, the 1 is carried to the hundred column and is added to the digits there, which in this case is none, for a total of 1. The sum is 124.

Students should complete the Vocabulary Notebook

Vocabulary Notebook Sample:

New Word	My Description
regroup	having 10 or more in a sum and moving it to the column to the left
Personal Connection	Drawing
Do you need to regroup when you add 68 + 34 =?	68 + 34 = 102

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 is the mathematical operation of combining two or more sets of number or objects into a total or sum.

Write several problems on the board and work them through with the students. . Be sure to include problems that require students to regroup as well as problems that do not require regrouping.

Talk through the process so that children can understand the process of addition.

Addition

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a set of Addition cards and a game board.
- 3. Shuffle the cards and place face down between the students.
- 4. Player 1 draws a card and completes the addition.
- 5. Player then finds the answer on the game board and marks it with a token.
- 6. Player 2 continues in the same way.
- 7. Play is over when all of the numbers are covered.

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



Closing

Review

Say:

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

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

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

Reflection (Confirm, Tweak, Aha!)

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



2nd Grade Addition

74	25	57	68
<u>+16</u>	+48	<u>+25</u>	<u>+27</u>
46	29	32	43
<u>+37</u>	<u>+52</u>	<u>+19</u>	<u>+28</u>
152	764	327	661
<u>+137</u>	<u>+222</u>	<u>+241</u>	<u>+135</u>
512	230	433	395
<u>+385</u>	<u>+247</u>	<u>+126</u>	<u>+503</u>
256	752	423	383
<u>+127</u>	<u>+169</u>	<u>+219</u>	<u>+448</u>
608	250	517	429
<u>+354</u>	+397	<u>+264</u>	<u>+284</u>



2nd Grade Addition

90	73	82	95
83	81	51	71
289	986	568	796
897	477	559	898
383	921	642	831
962	647	781	713



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Regrouping
Focus:	Addition

Materials:

White boards Vocabulary Notebooks Number Hunt Game Board

Cravolas 12 sided dice (1 for each child)

Activity at the end of the lesson plan Sock (for erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about addition? What is a two digit number? Give several examples of a 2 digit addition problem. What is a 3 digit number? Give several examples of a 3 digit number. What do you do if the sum of one of the columns is more than 10? What is that called? Write a sample addition problem on your white board. Trade white boards with a peer and solve the problem.

Content (the "Meat")

Problem of the Day

Explain knowing that the answer to the problem 8-4 helps you to know the answers to 80-40 and 800-400.

Fact Practice

Number Hunt

- 1. Divide students into pairs
- 2. Each pair needs a Number Hunt sheet (attached to this lesson plans)
- 3. Player rolls two, 12-sided dice.
- 4. Player adds or subtracts the two numbers.
- 5. If the number is not yet covered, then player may cover the number.
- 6. Next player repeats steps 1-3.
- 7. Winner is determined by who has the most numbers covered.

*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.



Math Vocabulary

Word for Today: regrouping

Description: Regrouping is a term we use to describe a process used in both addition and subtraction when we need to adjust for place value. In addition, we regroup by carrying the digit in the tens place of a sum to the column to the left and then including it in the addition of that column. In this problem, 46 + 78, when you add the 8 and the 6 you get a sum of 14. The 4 stays in the units or ones place, and the 1 (from the 10) is included in the addition of 4 + 7 + 1 for a total of 12. Technically, the 2 goes under the tens column, the 1 is carried to the hundred column and is added to the digits there, which in this case is none, for a total of 1. The sum is 124.

Students should complete the Vocabulary Notebook

Vocabulary Notebook Sample:

New Word	My Description
regroup	having 10 or more in a sum and moving it to the column to the left
Personal Connection	Drawing
Do you need to regroup when you add 68 + 34 =?	$68 \pm 34 = 102$

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 is the mathematical operation of combining two or more sets of number or objects into a total or sum.

Write several problems on the board and work them through with the students. . Be sure to include problems that require students to regroup as well as problems that do not require regrouping.

Talk through the process so that children can understand the process of addition.

Addition

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a set of Addition cards and a game board.
- 3. Shuffle the cards and place face down between the students.
- 4. Player 1 draws a card and completes the addition.
- 5. Player then finds the answer on the game board and marks it with a token.
- 6. Player 2 continues in the same way.
- 7. Play is over when all of the numbers are covered.

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



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

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

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

Reflection (Confirm, Tweak, Aha!)

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



Number Hunt

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

Number Hunt

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



2nd Grade Addition

74	25	57	68
<u>+16</u>	+48	<u>+25</u>	<u>+27</u>
46	29	32	43
<u>+37</u>	<u>+52</u>	<u>+19</u>	<u>+28</u>
152	764	327	661
<u>+137</u>	<u>+222</u>	<u>+241</u>	<u>+135</u>
512	230	433	395
<u>+385</u>	<u>+247</u>	<u>+126</u>	<u>+503</u>
256	752	423	383
<u>+127</u>	<u>+169</u>	<u>+219</u>	<u>+448</u>
608	250	517	429
<u>+354</u>	+397	<u>+264</u>	<u>+284</u>



2nd Grade Addition

90	73	82	95
83	81	51	71
289	986	568	796
897	477	559	898
383	921	642	831
962	647	781	713



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Regrouping
Focus:	Subtraction

Materials:

White boards Vocabulary Notebooks

Crayolas Decks of cards Activity at end of lesson plan

Game tokens Socks (use as erasers)

Opening

Pencils

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about subtraction? When do you need to regroup in subtraction? Do you need to regroup in these problems: 613 - 241; 743 - 558; 800 - 231? What do you call the answer in a subtraction problem? What does the word minus mean?

Content (the "Meat")			
Problem of the Day If you have a 2 inch square, what is the perimeter of the square? How do you know?		*Activity → Teachable Moment(s) throughout	
Fact Practice Draw!		During the lesson check in with students repeatedly.	
 Divide students into pairs and given Remove the face cards and joken Shuffle the deck. 	re each pair a deck of cards	Check in about what is happening and what they are thinking.	
4. Decide who will go first.5. First player draws two cards.		Take advantage of any teachable moments.	
6. Student adds or subtracts the cards.7. Student writes his/her problem on the white board, writing a complete number sentence.		Stop the class and focus on a student's key learning or understanding. Ask openended questions to	
Students take turns drawing card	s and creating problems.	determine what the rest of the group is thinking.	
		When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.	
Math Vocabulary		It is important to review	
Word for Today: regrouping		academic math vocabulary often throughout the day	
Description: Regrouping is a term we use to describe a process used in both addition and subtraction when we need to adjust for place value. In subtraction, we regroup by borrowing		Complete the Vocabulary	



from the digit to the left of the column we are subtracting in. It is like unpacking the tens, or the hundreds, or the thousands into bundles or units that we can work with in the subtraction. For example, in this problem, 74 - 38, when you want to subtract 8 from 4, there isn't enough to do that, so you borrow from the tens, leaving 6 tens and 10 + 4 ones or units. This is 14 - 8 which equals 6. Now you can move to the next subtraction in the tens column and subtract 6 - 3 = 3. The difference is 36.

Students should complete the Vocabulary Notebook

Vocabulary Notebook Sample:

New Word	My Description
regroup	borrowing one bundle from the column to the left
Personal Connection	Drawing
Do you need to regroup when you subtract 91 – 34?	91-34 = 57

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

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

Activity Subtraction

Subtraction

Subtraction is the reciprocal of addition. Subtraction begins with a total and then removes a specified number from the total and then identifies what the difference is.

Write several problems on the board and work them through with the students. Be sure to include problems that require students to regroup as well as problems that do not require regrouping.

Talk through the process so that children can understand the process of subtraction.

Subtraction

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a set of Subtraction cards and a game board.
- 3. Shuffle the cards and place face down between the students.
- 4. Player 1 draws a card and completes the subtraction.
- 5. Player then finds the answer on the game board and marks it with a token.
- 6. Player 2 continues in the same way.
- 7. Play is over when all of the numbers are covered.

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	
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 Please recap what we did toda 	у.	
 Did we achieve our objectives? 		
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Three Whats

Ask the following three what questions:

What was your key learning for the day?

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

Reflection (Confirm, Tweak, Aha!)

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



2nd Grade Subtraction

76	58	77	68
<u>-14</u>	<u>-42</u>	<u>-25</u>	<u>-27</u>
96	89	42	43
<u>-37</u>	<u>-52</u>	<u>-19</u>	<u>-28</u>
152	764	327	661
<u>-137</u>	<u>-222</u>	<u>-241</u>	<u>-135</u>
512	830	433	795
<u>-385</u>	<u>-247</u>	<u>-126</u>	<u>-503</u>
256	752	423	789
<u>-127</u>	<u>-169</u>	<u>-219</u>	<u>-448</u>
608	950	517	429
<u>-354</u>	<u>-397</u>	<u>-264</u>	<u>-284</u>



2nd Grade Subtraction

62	16	52	41
59	37	23	15
15	542	86	526
127	583	307	292
129	583	204	341
254	553	253	145



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Regrouping
Focus:	Subtraction

Materials:

White boards Vocabulary Notebooks

Crayolas Cards without tens, face cards and jokers
Activity at the end of this lesson plan Socks (use as erasers)

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about subtraction? When do you need to regroup in subtraction? Do you need to regroup in these problems: 613 – 241; 743 – 558; 800 – 231? What do you call the answer in a subtraction problem? What does the word minus mean?

Problem of the Day	*Activity → Teachable Moment(s) throughout
Put the following 5 numbers in order from smallest to largest.	During the lesson check in with students repeatedly.
356 365 371 358 369 Fact Practice Bump It Up! Add A Zero	Check in about what is happening and what they are thinking. Take advantage of any
 Divide students into pairs Give each pair a white board and a deck of cards (without face cards, jokers, or 10s) 	teachable moments. Stop the class and focus on a
3. The object of this fact practice is to sum numbers until you reach 1,000.4. Student draws 2 cards, adds the value of the cards together, multiplies by ten and writes the total on the sheet.	student's key learning or understanding. Ask open- ended questions to determine what the rest of
5. It is not the other person's turn to do the same6. When play returns to the first player, the process is repeated, although this time, the totals are added together.	the group is thinking. When possible, engage students in a "teach to learn"
 First person to 1,000 wins. Example: Player draws a 7 and a 4. Total is 11. Multiply by 10 (add the zero) equals 110. Next turn, player draws a 3 and a 2 which totals 5. Multiply by 10 and I now add 50 to 110 for a total of 160. 	



Math Vocabulary

Word for Today: regrouping

Description: Regrouping is a term we use to describe a process used in both addition and subtraction when we need to adjust for place value. In subtraction, we regroup by borrowing from the digit to the left of the column we are subtracting in. It is like unpacking the tens, or the hundreds, or the thousands into bundles or units that we can work with in the subtraction. For example, in this problem, 74 - 38, when you want to subtract 8 from 4, there isn't enough to do that, so you borrow from the tens, leaving 6 tens and 10 + 4 ones or units. This is 14 - 8 which equals 6. Now you can move to the next subtraction in the tens column and subtract 6 - 3 = 3. The difference is 36.

Students should complete the Vocabulary Notebook

Vocabulary Notebook Sample:

New Word	My Description
regroup	borrowing one bundle from the column to the left
Personal Connection	Drawing
Do you need to regroup when you subtract 91 – 34?	91-34 = 57

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

Complete the Vocabulary notebook for each word.

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

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

Activity Subtraction

Subtraction

Subtraction is the reciprocal of addition. Subtraction begins with a total and then removes a specified number from the total and then identifies what the difference is.

Write several problems on the board and work them through with the students. Be sure to include problems that require students to regroup as well as problems that do not require regrouping.

Talk through the process so that children can understand the process of subtraction.

Subtraction

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a set of Subtraction cards and a game board.
- 3. Shuffle the cards and place face down between the students.
- 4. Player 1 draws a card and completes the subtraction.
- 5. Player then finds the answer on the game board and marks it with a token.
- 6. Player 2 continues in the same way.
- 7. Play is over when all of the numbers are covered.

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 to 	ay.	
 Did we achieve our objective 		
	Debrief	

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

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

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



2nd Grade Subtraction

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<u>-14</u>	<u>-42</u>	<u>-25</u>	<u>-27</u>
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2nd Grade Subtraction

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129	583	204	341
254	553	253	145



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Regrouping
Focus:	Addition and Subtraction

Materials:

White boards Vocabulary Notebooks

Crayolas cards (remove face card and jokers)
Socks Activity at the end of this lesson plan

Opening

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about subtraction? When do you need to regroup in subtraction? What do you know about regrouping in addition? What do you call regrouping in subtraction? (borrowing) What do you call regrouping in addition? (addition) Do you need to regroup in these problems: 613 - 241; 743 - 558; 800 - 231? Do you need to regroup in these problems: 785 + 297; 743 + 558; 800 + 231?

Content (the "Meat")

Problem of the Day

Joe's Bakery sold 284 cupcakes on Tuesday. Smith's Bakery sold 241 cupcakes on Tuesday. Write a number sentence to show how many cupcakes they sold all together. Write another number sentence to show how many more cupcakes Joe's sold than Smith's.

Fact Practice

Draw!

- 1. Divide students into pairs and give each pair a deck of cards
- 2. Remove the face cards and jokers from the deck of cards.
- Shuffle the deck.
- 4. Decide who will go first.
- 5. First player draws two cards.
- 6. Student adds or subtracts the cards.
- 7. Student writes his/her problem on the white board, writing a complete number sentence.
- 8. Students take turns drawing cards and creating problems.

*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.



Math Vocabulary

Word for Today: operation

Description: The term operation most commonly refers to the process of addition, subtraction, multiplication, division. Addition and subtraction are reciprocal actions. Adding is combining two addends, while subtraction is reducing a total by a specified number and finding the difference.

Have students complete his/her Vocabulary Notebook, making an entry for the word "cents".

Vocabulary Notebook Sample:

New Word	My Description
operation	addition, subtraction, multiplication, division
Personal Connection	Drawing
I can perform the operations of addition and subtraction.	45 + 27 = 72 - 57 =

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 and Subtraction

Addition and Subtraction

Addition and subtraction are reciprocal operations. In addition you combine the two addends to find the sum or the total. In subtraction you start with the minuend (which represents the total), reduce the minuend by the subtrahend, and the amount that remains is identified as the difference.

In addition, either the top addend or the bottom addend may be largest. In subtraction, the minuend must be larger than both the subtrahend and the difference and the difference.

Add or Subtract

Directions:

- 1. Divide students into pairs.
- 2. Give each pair two decks of cards with the face cards, jokers, and tens removed. Also give each pair white boards and one 6-sided die.
- 3. Shuffle the cards and place face down between the players.
- 4. Player 1 draws 6 cards.
- 5. Player then rolls the die. If the die is an odd number, the player must create an addition problem. If the die is an even number, the player must create a subtraction problem.
- 6. Player must then solve the problem.
- 7. Player 2 continues in the same way.
- 8. Game is over when all cards have been played.

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



Closing
Review

Say:

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

Debrief

Three Whats

Ask the following three what questions:

What was your key learning for the day?

What opportunities might you have to do this same thing in the "real world"?

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

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



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Regrouping
Focus:	Addition and Subtraction

Materials:

Cravolas

White boards Vocabulary Notebooks

Double 9 Dominoes (attached)

Socks decks of cards

Opening

Activity at end of lesson plan

State the objective

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

Gain prior knowledge by asking students the following questions

What do you know about subtraction? When do you need to regroup in subtraction? What do you know about regrouping in addition? What do you call regrouping in subtraction? (borrowing) What do you call regrouping in addition? (addition) Do you need to regroup in these problems: 613 – 241; 743 – 558; 800 – 231? Do you need to regroup in these problems: 785 + 297; 743 + 558; 800 + 231?

Content (the "Meat")		
Problem of the Day Draw three coins that will equal 55¢. How do you know that your answer is correct?	*Activity → Teachable Moment(s) throughout	
Fact Practice Spots and Dots There is a master of Double 9 Dominos attached to this lesson plan. You will need 1 full set for each pair of students in your class. It is recommended that you duplicate on card stock and if possible, laminate for use again in the future. Players sit across from each other. Dominoes are between them, face (or spots) down. Each student draws a domino and writes the addition problem on their white board, adding the numbers represented by the spots Example: Domino drawn is	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	
Addition: 2 + 3 = 5 Math Vocabulary	the group is thinking. When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. It is important to review	
Word for Today: operation Description: The term operation most commonly refers to the process of addition,	academic math vocabulary often throughout the day.	



subtraction, multiplication, division. Addition and subtraction are reciprocal actions. Adding is combining two addends, while subtraction is reducing a total by a specified number and finding the difference.

Have students complete his/her Vocabulary Notebook, making an entry for the word "cents".

Vocabulary Notebook Sample:

New Word	My Description
operation	addition, subtraction, multiplication, division
Personal Connection	Drawing
I can perform the operations of addition and subtraction.	45 + 27 = 72 - 57 =

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 and Subtraction**

Addition and Subtraction

Addition and subtraction are reciprocal operations. In addition you combine the two addends to find the sum or the total. In subtraction you start with the minuend (which represents the total), reduce the minuend by the subtrahend, and the amount that remains is identified as the difference.

In addition, either the top addend or the bottom addend may be largest. In subtraction, the minuend must be larger than both the subtrahend and the difference and the difference.

Add or Subtract

Directions:

- 1. Divide students into pairs.
- 2. Give each pair two decks of cards with the face cards, jokers, and tens removed. Also give each pair white boards and one 6-sided die.
- 3. Shuffle the cards and place face down between the players.
- 4. Player 1 draws 6 cards.
- 5. Player then rolls the die. If the die is an odd number, the player must create an addition problem. If the die is an even number, the player must create a subtraction problem.
- 6. Player must then solve the problem.
- 7. Player 2 continues in the same way.
- 8. Game is over when all cards have been played.

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.



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• [Did we achieve our objectives?		
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Double 9 Dominoes

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teams

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

Materials:

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

Opening

State the objective

Today we are going to have fun playing a game.

Content (the "Meat")

Activity

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

What's My Value? Comparisons Addition Subtraction Add or Subtract

Closing

Review

Say:

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

- 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)
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