

Component	Math	
Grade Level:	2 nd Grade	
Lesson Title:	Difference and Countdown	
Focus:	Subtraction	

Materials:

White boards Vocabulary Notebooks

Crayolas Dice

Socks Countdown Cards 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 addition and subtraction.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

Content ((the "Meat")
COLLCIL	tile ivicat

Problem of the Day

John collected 29 cans. Martha collected 53 cans. How many cans did they collect together? How many more cans did Martha collect that John?

Fact Practice

Spokes on a Wheel

- 1. Divide students into pairs.
- 2. On a white board, student draws a small circle with 9 spokes coming out of it (should look like a bicycle tire).
- 3. Have students choose to put a 6, 7 or 8 in the center circle.
- 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.
- **6.** Process continues until all spokes have an equation.

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

Check in about 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: difference

Description: The term difference is used to describe the answer in a subtraction problem. In subtraction you begin with a total, take some of the away and then are left with the difference, or the new total. Example:

9 74 <u>-7</u> <u>-51</u> 2 23

The difference in the first problem is 1, in the second 23.

Students complete the Vocabulary Notebook

Vocabulary Notebook Sample:

New Word	My Description
difference	the answer in a subtraction problem
Personal Connection	Drawing
What is the different between 9 and 5?	9-5=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 Countdown!

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

Countdown

Practicing addition and subtraction is an essential skill that is developed in 2^{nd} grade. In addition to simple subtraction, students must also practice regrouping (or borrowing). This activity will give students an opportunity to practice subtraction in an engaging way.

Countdown

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a deck of Countdown Cards, a white board for each student, pen/crayon.
- 3. At the top of the white board student write the number 100.
- 4. Player 1 then draws a Countdown Card and subtracts that number from 100, drawing a circle around the total.
- 5. Player 2 then does the same thing.

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.



- 6. Player 1 draws a second card for his/her second turn, subtracting the number from the circled total.
- 7. Player 2 now takes his/her next turn, subtracting and circling the total.
- 8. Play continues until one player reaches 10 or less.

	Closing
Say:Please recap what we did today.Did we achieve our objectives?	Review
	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. (Aha!)





Countdown Cards

11	12	13	14
15	16	17	18
19	20	21	22
23	24	25	26
27	28	29	30



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Regroup and Countdown
Focus:	Subtraction

Materials:		
White boards	Vocabulary Notebooks	Countdown Cards (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 addition and subtraction.

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

Problem of the Day

Mental math is when you solve a problem in your head without paper and pencil. Do the following math problem using mental math. Then explain how you did it.

53 + 47

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: regroup (borrow)

Description: The term "regroup" is used to describe the process of regrouping that we do in a subtraction problem so we have enough to subtract from. For example, if you have 2 packages of gum that are full, each one with 10 pieces of gum in it, and then 3 extra single pieces of gum, you would have 23 pieces of gum. (20 in the unopened packages and 3 singles). If you want to give gum to 4 friends plus yourself (you will need 5 pieces of gum). They only way you can do this is to open one of the packages, taking out all of the pieces of gum. When you do that you have those 10 + the 3 you had, so you have 13 single pieces of gum and 1 packages of ten. Now you can give away 5 pieces of gum and you will have 1 package + 8 single pieces or a total of 18 pieces of gum. What you have done is regrouped or reorganized the gum you had. You "borrowed" from the package to have enough to give out to each person.

Create an entry in the Vocabulary Notebook to share your understanding of the word regroup (borrow).

Vocabulary Notebook Sample:

New Word	My Description
regroup	rewrite a number moving tens to ones or hundred to tens so you can subtract
Personal Connection	Drawing
When you count single objects, you don't have to regroup, but to make it easier to subtract, you need to know how.	Tens Ones -1 -1 -2 -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 Countdown

Practicing addition and subtraction is an essential skill that is developed in 2nd grade. In addition to simple subtraction, students must also practice regrouping (or borrowing). This activity will give students an opportunity to practice subtraction in an engaging way.

Countdown

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a deck of Countdown Cards, a white board for each student, pen/crayon.
- 3. At the top of the white board student write the number 100.
- 4. Player 1 then draws a Countdown Card and subtracts that number from 100, drawing a circle around the total.
- 5. Player 2 then does the same thing.
- 6. Player 1 draws a second card for his/her second turn, subtracting the number from the circled total.
- 7. Player 2 now takes his/her next turn, subtracting and circling the total.
- Play continues until one player reaches 10 or less.

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.

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





Countdown Cards

11	12	13	14
15	16	17	18
19	20	21	22
23	24	25	26
27	28	29	30



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Just Subtract
Focus:	Subtraction

Materials:		
White boards	Vocabulary Notebooks	Just Subtract Game Board (end of lesson plan)
Crayolas	decks of cards	
Socks	dice	

Opening

State the objective

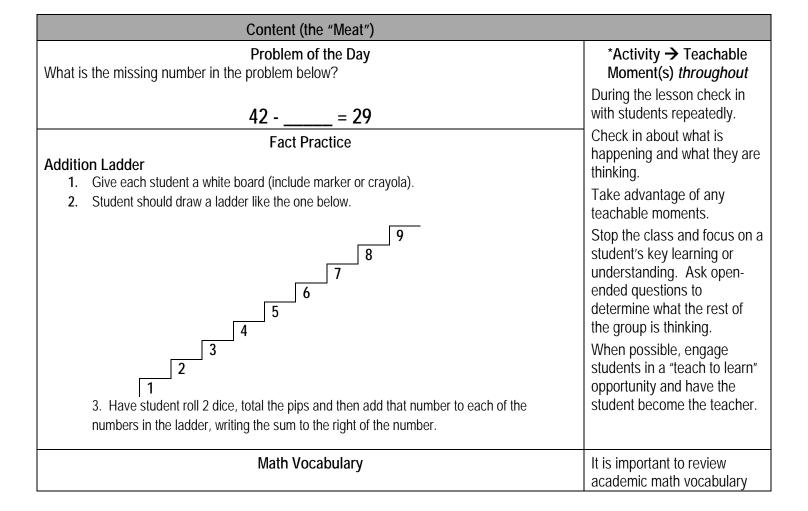
Today we are going to practice using our math vocabulary and math skills in addition and subtraction

Gain prior knowledge by asking students the following questions

What do you know about addition? What do you know about subtraction? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?





Word for Today: regroup (borrow)

Description: Have a discussion about the word regroup and/or borrow (Lesson 1). Ask students to provide you with examples of when they would use this math concept. Write several problems on the board and work on them together, be sure that you talk them through the process.

Review the entry in your Vocabulary Notebook for the term "regroup". Review it with a peer and if need be make corrections or additions.

Vocabulary Notebook Sample:

New Word	My Description
regroup	changing ones into 10s or 10s into hundreds when you are adding
Personal Connection	Drawing
Be sure to regroup when you add 58 + 39.	# 4 5 # 6 7 MATH 1 2 REGROUPING

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

Just Subtract!

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

Just Subtract!

Subtraction practice helps students become stronger at performing this operation.

Just Subtract!

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a Just Subtract game board, white boards, pens/crayons, 1 die, and game token for each player.
- 3. Player 1 rolls the die and moves that many spaces.
- 4. He/she then does the math problem. If he/she gets the correct answer, he/she stays on that space. If answer is incorrect, then he/she returns to the previous space.
- 5. Player 2 then takes his/her turn.
- 6. Play is over when one student reaches the finish line.

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. (Aha!)



Just Subtract

Finish					,
65 <u>-41</u>	89 <u>-26</u>	88 <u>-52</u>	27 <u>-12</u>	79 <u>-52</u>	76 <u>-13</u>
					85 <u>-73</u>
35 <u>-14</u>	95 <u>-71</u>	74 <u>-22</u>	93 <u>-41</u>	43 <u>-11</u>	58 <u>-33</u>
77 <u>-33</u>					
87 <u>-36</u>	88 <u>-42</u>	29 <u>-14</u>	66 <u>-53</u>	27 <u>-10</u>	94 <u>-82</u>
					45 <u>-24</u>
96 <u>-63</u>	48 <u>-14</u>	27 <u>-14</u>	67 <u>-23</u>	56 <u>-22</u>	58 <u>-17</u>
Start					



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Numeral and Just Subtract
Focus:	Subtraction

Materials:

White boards Vocabulary Notebooks

Crayolas Cards

Socks Just Subtract Game Board (end of lesson plan), dice

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 addition? What do you know about subtraction? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

Content (the "Meat
Problem of the Day

Write a story to go with the number sentence below:

19 + 31 = 50

Fact Practice

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.

*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: numeral

Description: The term "numeral" refers to the symbol that represents a number. For example, if you have one hundred cookies, the numeral that would represent the number of cookies that you have is 100. We sometimes call numerals numbers, and numbers numerals, because we understand that the numeral is representing something that is real. Create an entry for the word "numeral" in your Vocabulary Notebook.

Vocabulary Notebook Sample:

New Word	My Description
numeral	what I write to show how much I have
Personal Connection	Drawing
I have three hot dogs and I write the number three with this numeral: 3	

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

Complete the Vocabulary notebook for each word.

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

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

Activity

Just Subtract!

Subtraction practice helps students become stronger at performing this operation.

Just Subtract!

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a Just Subtract game board, white boards, pens/crayons, 1 die, and game token for each player.
- 3. Player 1 rolls the die and moves that many spaces.
- 4. He/she then does the math problem. If he/she gets the correct answer, he/she stays on that space. If answer is incorrect, then he/she returns to the previous space.
- 5. Player 2 then takes his/her turn.
- 6. Play is over when one student reaches the finish line.

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. (Aha!)



Just Subtract

Finish					
65 <u>-41</u>	89 <u>-26</u>	88 <u>-52</u>	27 <u>-12</u>	79 <u>-52</u>	76 <u>-13</u>
					85 <u>-73</u>
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96 <u>-63</u>	48 <u>-14</u>	27 <u>-14</u>	67 <u>-23</u>	56 <u>-22</u>	58 <u>-17</u>
Start					



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Tic Tac Toe Second
Focus:	Math Review

Materials:

White boards Vocabulary Notebooks Number Hunt Game Board

Crayolas 12 sided dice (1 for each child)

Socks Tic Tac Toe #2

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

How do you play Tic Tac Toe?

What do you know about addition? What do you know about subtraction? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

Content (the "Meat")	
Problem of the Day	*Activity → Teachable Moment(s) throughout
What is the value of 7 in the following number? 672	During the lesson check in with students repeatedly.
Fact Practice Number Hunt	Check in about what is happening and what they are thinking.
 Divide students into pairs. Each pair needs a Number Hunt sheet (attached to this lesson plans). 	Take advantage of any teachable moments.
 Player rolls two, 12-sided dice. Player adds or subtracts the two numbers. If the number is not yet covered, then player may cover the number. Next player repeats steps 1-3. Winner is determined by who has the most numbers covered. 	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: sum

Description: The term "sum" refers to the answer you get when you add numbers together. You have two addends and when you add them together you have a total, and that total is called the sum.

Ask student to write 3-5 number sentences that end in a sum (addition problem)

Vocabulary Notebook Sample: Create a page for the word "sum".

New Word	My Description
sum	The total when you are adding numerals together
Personal Connection	Drawing
What is the sum of 9 + 8? It is 17.	Addition: 8 + 3 = 11 Addend Addend Sum

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 Tic Tac Toe #2

This game is played just like Tic Tac Toe only with teams.

Tic Tac Toe #2 Directions:

- 1. Divide students into two teams.
- 2. Give each team a Tic Tac Toe game board.
- 3. Team works on the answers for each space.
- 4. Teams them come together to play Tic Tac Toe, answering the questions to take a space.
- 5. Play the best 3 out of 5 to determine which team wins.

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:			
 Pleas 	e 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.



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



Tic Tac Toe #2

Answer these two problems: 53 + 28 85 -13	This is a cylinder: Name two things that are shaped like a cylinder.	If you begin counting at 23 and you count by 5's, what are the next three numbers you will say?
If you have 21 cookies and you divide them evenly between yourself and two friends, how many do you each have?	Would you have more money if you had 3 quarters and 2 dimes or if you have 10 dimes? Why do you say what you say?	List 4 things that are shaped like a square.
If you count by 3's, you would say 3, 6, 9, 12,,	Answer these two problems: 93 +19 63 -28	Which is more: 43 + 28 = 57 + 13 =



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Tic Tac Toe 2 Second
Focus:	Math Review

Materials:

White boards Vocabulary Notebooks

Crayolas Playing cards

Socks Tic Tac Toe Game Board at end of 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 addition? What do you know about subtraction? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

How do you play Tic Tac Toe? What are some strategies you can use to win the game?

Content (the "Meat")

	Content (the "Meat")	
	Problem of the Day	*Activity → Teachable Moment(s) throughout
Mona kno 36.	ws that $30 + 6 = 36$. Write at least 4 other number sentences that would equal	During the lesson check in with students repeatedly.
Target	Fact Practice	Check in about what is happening and what they are thinking.
1. D	ivide students into trios. ach trio needs a deck of cards without face cards and jokers.	Take advantage of any teachable moments.
3. PI	lace the cards face up in a TicTac Toe Grid. urn up a 10th card which will be to the side and becomes the target number (aces count as 1)	Stop the class and focus on a student's key learning or
	ach player makes an equation with some or all of the numbers in the grid to equal the target umber. Students may add or subtract.	understanding. Ask open- ended questions to
	ach card may be used only one time in the equation.	determine what the rest of
	s the cards are being picked up, the player must say the equation aloud—for example if the rget card is 10, then I could say $6 + 4 = 10$, and pick up the 6 and the 4.	the group is thinking. When possible, engage
	fter one player finishes his/her turn, then the cards taken are replaced by cards from the emaining deck.	students in a "teach to learn" opportunity and have the
	layer with the cards at the end of the game win.	student become the teacher.
	Math Vocabulary	It is important to review



Word for Today: whole number

Description: The term "whole number" refers to a number that does not have parts. There is no fraction (part) or decimal (another kind of parts). Whole numbers include 3, 4, 5 and 34, and 345, and so on. Also with a whole number you can't be in the negative. For example, if you have one dollar but you need three, you are negative, or short 2 dollars. While the one dollar you have is a whole number, the 2 you don't have are negative, so they are not a whole number.

Have students give you an example of whole numbers. Write them on the board. Students should complete the Vocabulary Notebook.

Vocabulary Notebook Sample:

New Word	My Description
whole number	A whole number is a positive number that has no fractional parts
Personal Connection	Drawing
On my birthday I am exactly 9, a whole number.	

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
Tic Tac Toe #1

This game is played just like Tic Tac Toe only with teams.

Tic Tac Toe #1 Directions:

- 1. Divide students into two teams.
- 2. Give each team a Tic Tac Toe game board.
- 3. Team works on the answers for each space.
- 4. Teams them come together to play Tic Tac Toe, answering the questions to take a space.
- 5. Play the best 3 out of 5 to determine which team wins.

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.



Tic Tac Toe #1

Count by 10's to 100. Then count backwards by 10 from 100 to zero	If you are counting by 2's and you begin at 57, what will be the next number you say?	Fill in each blank: 7 + = 13 5 + = 15 16 + 18 =
If you saw 4 dogs, how many legs would you see?	Name the odd numbers between 20 and 40.	If Joni has 8 cookies and Ted has 3 cookies, how many do they have together? How many more does Joni have?
How many sides on each of the shapes? triangle square hexagon	Draw a square. Draw a rectangle. Draw a hexagon. How are they alike? How are they different?	Draw a circle. Draw an oval. How are they alike? How are they different?



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Movin On Up
Focus:	Subtraction

Materials:

White boards Vocabulary Notebooks

Crayolas cards without tens, face cards and jokers

Socks Movin' Up Game Board

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 multiplication? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving a multiplication problem?

What are the basic operations that you need to utilize during math?

Content (the "Meat")

Problem of the Day

Foster's Farms has 61 brown chickens and 38 white chickens. How many chickens does Foster's Farms have altogether? How many more brown chickens than white?

Fact Practice Bump It Up! Add A Zero

- 1. Divide students into pairs.
- 2. Give each pair a white board and a deck of cards (without face cards, jokers, or 10s).
- 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.
- 5. It is not the other person's turn to do the same.
- 6. When play returns to the first player, the process is repeated, although this time, the totals are added together.
- 7. First person to 1,000 wins.
- 8. 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.

*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: multiplication

Create the entry for the word "multiplication in your Vocabulary Notebook.

Vocabulary Notebook Sample:

New Word	My Description
multiplication	Repeated addition, adding the same number a specific number of times.
Personal Connection	Drawing
I am learning my multiplication tables. I know that 5 x 3 = 15.	3 {

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

Complete the Vocabulary

notebook for each word.

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

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

Activity Movin' on Up

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

Movin' On Up

Directions:

- 1. Divide students into pairs.
- 2. Give each pair a Movin' On Up Game Board, Movin' On Up Cards, a die, white boards, pens/crayons, and game tokens.
- 3. Shuffle the cards and place them face down to the right of the Game Board.
- 4. Player 1 draws a card from the deck and finds an answer to the problem.
- 5. If the answer is correct, then he/she rolls the dice and moves forward that many places. If the answer is incorrect, then player stays where he/she is.
- 6. Player 2 then continues just as Player 1 did.
- 7. Game is over when player reaches the "Finish".

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.		

Debrief

Three Whats

Ask the following three what questions:

Did we achieve our objectives?

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.



Movin' On Up

Finish					
			Lose A Turn		
				Take Another Turn	
	Free Pass				
					Go Back 2 spaces
Start		•			•

Movin' On Up Cards



16 – 3 =	32 – 7 =	47 – 1 =	64 – 9 =	83 – 2 =	18 – 7 =
33 – 4 =	52 – 6 =	65 – 5 =	84 – 6 =	24 – 8 =	35 – 8 =
54 – 3 =	67 – 6 =	85 – 5 =	25 – 7 =	37 – 4 =	55 – 2 =
69 – 2 =	87 – 8 =	26 – 8 =	38 – 6 =	55 – 7 =	70 – 8 =
92 – 5 =	27 – 5 =	41 – 8 =	93 – 8 =	28 – 2 =	57 – 8 =
71 -1 =	43 – 3 =	58 – 7 =	73 – 6 =	96 – 4 =	29 – 8 =
43 – 9 =	61 – 2 =	74 – 3 =	99 – 9 =	31 – 3 =	44 – 7 =
62 – 4 =	75 – 9 =	32 – 1 =	46 – 4 =	63 – 7 =	76 -4 =



Component	Math	
Grade Level:	2 nd Grade	
Lesson Title:	Estimation and Movin' On Up	
Focus:	Subtraction	

Materials:

White boards Vocabulary Notebooks pencils

Crayolas decks of cards Movin' On Up (end of plan)

Socks game tokens

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 addition? What do you know about subtraction? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

		Co	ntent (the "Meat")	
What is	Problem of the Day What is the rule of the table below?			*Activity → Teachable Moment(s) throughout
	<u>In</u>	Out		During the lesson check in with students repeatedly.
	19 16 13 10	14		Check in about what is happening and what they are thinking.
		Take advantage of any teachable moments.		
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. 3. 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 opportunity and have			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: estimation

Description: The term "estimation" refers to making a reasonable guess as to how many of something there are. In other words, it is a close guess of the actual value, usually with some thought or calculation involved. If you wanted to estimate how many beans there were in 10 handfuls of jelly beans, you could take one handful, count the jelly beans that were in that handful, and then multiply by 10 so you can estimate how many jelly beans there would be in 10 handfuls.

Create the entry for the word "estimation" in the Vocabulary Notebook with a peer.

Vocabulary Notebook Sample:

New Word	My Description
estimation	Making a best guess as to how many there are
Personal Connection	Drawing
I estimate that there are 200 beans in the jar.	

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 Movin' On Up

Subtraction practice helps students become stronger at performing this operation.

Movin' On Up Directions:

- 1. Divide students into pairs.
- 2. Give each pair a Movin' On Up Game Board, Movin' On Up Cards, a die, white boards, pens/crayons, and game tokens.
- 3. Shuffle the cards and place them face down to the right of the Game Board.
- 4. Player 1 draws a card from the deck and finds an answer to the problem.
- 5. If the answer is correct, then he/she rolls the dice and moves forward that many places. If the answer is incorrect, then player stays where he/she is.
- Player 2 then continues just as Player 1 did.
- 7. Game is over when player reaches the "Finish".

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.		

Debrief

Three Whats

Ask the following three what questions:

Did we achieve our objectives?

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.



Movin' On Up

Finish				
		Lose A Turn		
			Take Another Turn	
	Free Pass			
				Go Back 2 spaces
Start		 		



16 – 3 =	32 – 7 =	47 – 1 =	64 – 9 =	83 – 2 =	18 – 7 =
33 – 4 =	52 – 6 =	65 – 5 =	84 – 6 =	24 – 8 =	35 – 8 =
54 – 3 =	67 – 6 =	85 – 5 =	25 – 7 =	37 – 4 =	55 – 2 =
69 – 2 =	87 – 8 =	26 – 8 =	38 – 6 =	55 – 7 =	70 – 8 =
92 – 5 =	27 – 5 =	41 – 8 =	93 – 8 =	28 – 2 =	57 – 8 =
71 -1 =	43 – 3 =	58 – 7 =	73 – 6 =	96 – 4 =	29 – 8 =
43 – 9 =	61 – 2 =	74 – 3 =	99 – 9 =	31 – 3 =	44 – 7 =
62 – 4 =	75 – 9 =	32 – 1 =	46 – 4 =	63 – 7 =	76 -4 =



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Up Up and Awy
Focus:	Double Digit Addition

Materials:

White boards Vocabulary Notebooks

Cravolas Double 9 Dominoes (attached)

Socks decks of cards

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 addition? What do you know about subtraction? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

Content (the "Meat")

Problem of the Day

Read the number below. Use pictures, numbers, or words to show the number in two other ways.

349

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



Addition: 2 + 3 = 5

*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 the place where the digit is located. We only have 10 digits: 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9, yet we can make an infinite number of numerals out of those digits. In the number 582, the 5 equals 500, the 8 equals 80 and 2 equals 2. Place value allows us ease and flexibility with numbers.

Create an entry for the term "place value" in your Vocabulary Notebook.

Vocabulary Notebook Sample:

New Word	My Description
place value	digits can be in different places to make larger or smaller numbers
Personal Connection	Drawing
This is a 3 digit number with hundreds, tens, and ones places.	hundreds tens ones

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

Up, Up and Away

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

Up, Up and Away!

Addition practice helps students become stronger at performing this operation.

Up, Up and Away

Directions:

- 1. Divide students into pairs.
- 2. Give each pair an Up, Up and Away Game Board, Up, Up and Away Cards, a die, white boards, pens/crayons, and game tokens.
- 3. Shuffle the cards and place them face down to the right of the Game Board.
- 4. Player 1 draws a card from the deck and finds an answer to the problem.
- 5. If the answer is correct, then he/she rolls the dice and moves forward that many places. If the answer is incorrect, then player stays where he/she is.
- 6. Player 2 then continues just as Player 1 did.
- 7. Game is over when player reaches the "Finish".

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. (Aha!)



Double 9 Dominoes

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Up Up and Away

Finish				
		Lose A Turn		
			Take Another Turn	
	Free Pass			
				Go Back 2 spaces
Start				



11 + 37 =	13 + 68 =	15 + 33 =	17 + 65 =	18 + 42 =	19 + 44=
22 + 55 =	23 + 36 =	24 + 44 =	26 + 57 =	27 + 19 =	29 + 12 =
31 + 49 =	32 + 7 =	34 + 58 =	35 + 46 =	37 + 13 =	38 + 37 =
40 + 56 =	42 + 33 =	43 + 17 =	46 + 28 =	47 + 25 =	49 + 49 =
51 + 39 =	54 + 39 =	55 + 6 =	57+ 34 =	58 + 27 =	59 + 15 =
61 + 23 =	62 + 19 =	53 + 29 =	66 + 14 =	67 + 3 =	68 + 16 =
71 + 27 =	74 + 7 =	76 + 23 =	77 + 4 =	79 + 9 =	81 + 16 =
83 + 9 =	85 + 7 =	87 + 2 =	86 + 5 =	88 + 8 =	92 + 14 =



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	Draw and Up Up and Away
Focus:	Double Digit Addition

Materials:

White boards Vocabulary Notebooks

Crayolas cards (remove face card and jokers)
Socks Double 6 and/or Double 9 Dominoes

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 addition? What do you know about subtraction? What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

Content (the "Meat")

Problem of the Day

Mayra says that there is an 8 in the tens place in the number below. Is she correct? Tell why you think so.

5,826

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.
- 3. 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: factor

Description: The term "factor" refers to the numbers that you multiply together to get a product. For example $3 \times 4 = 12$. Three and four are factors of this problem. Since you can also multiply $1 \times 12 = 12$ and $2 \times 6 = 12$, we know that the numbers that are factors of twelve include 1, 2, 3, 4, 6, and 12.

What are the factors of 18 and 24? Create a list on the board.

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

Vocabulary Notebook Sample:

New Word	My Description
factor	the numbers you multiply together in a multiplication problem
Personal Connection	Drawing
5 x 3 are the factors in the multiplication problem, 5 x 3 = 15.	5 x 3

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

Complete the Vocabulary notebook for each word.

When possible, have students experience the word (Ex. 4 students creating a

right angle, multiple students

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

acting out an equation).

Activity

Up, Up and Away!

Addition practice helps students become stronger at performing this operation.

Up, Up and Away Directions:

- 1. Divide students into pairs.
- 2. Give each pair an Up, Up and Away Game Board, Up, Up and Away Cards, a die, white boards, pens/crayons, and game tokens.
- 3. Shuffle the cards and place them face down to the right of the Game Board.
- 4. Player 1 draws a card from the deck and finds an answer to the problem.
- 5. If the answer is correct, then he/she rolls the dice and moves forward that many places. If the answer is incorrect, then player stays where he/she is.
- 6. Player 2 then continues just as Player 1 did.

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?

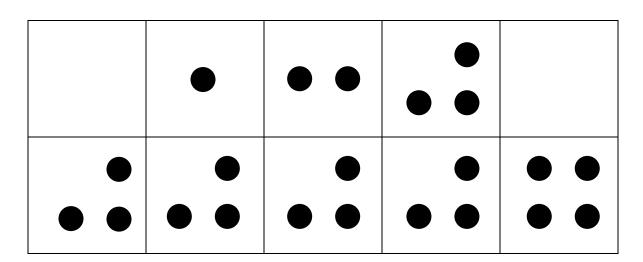
Reflection (Confirm, Tweak, Aha!)

- 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. (Aha!)



Double 6 Dominoes

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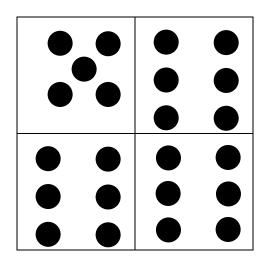


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Double 9 Dominoes

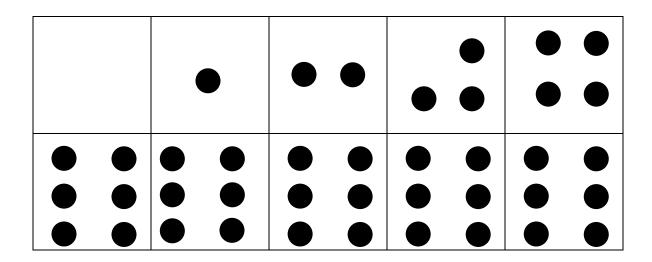
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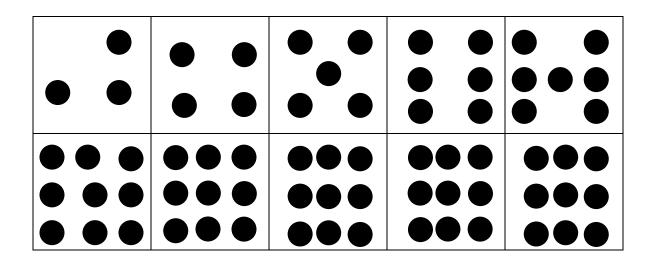
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Up Up and Away

Finish				
		Lose A Turn		
			Take Another Turn	
	Free Pass			
				Go Back 2 spaces
Start				•



11 + 37 =	13 + 68 =	15 + 33 =	17 + 65 =	18 + 42 =	19 + 44=
22 + 55 =	23 + 36 =	24 + 44 =	26 + 57 =	27 + 19 =	29 + 12 =
31 + 49 =	32 + 7 =	34 + 58 =	35 + 46 =	37 + 13 =	38 + 37 =
40 + 56 =	42 + 33 =	43 + 17 =	46 + 28 =	47 + 25 =	49 + 49 =
51 + 39 =	54 + 39 =	55 + 6 =	57+ 34 =	58 + 27 =	59 + 15 =
61 + 23 =	62 + 19 =	53 + 29 =	66 + 14 =	67 + 3 =	68 + 16 =
71 + 27 =	74 + 7 =	76 + 23 =	77 + 4 =	79 + 9 =	81 + 16 =
83 + 9 =	85 + 7 =	87 + 2 =	86 + 5 =	88 + 8 =	92 + 14 =



Component:	Math
Grade Level:	2 nd Grade
Lesson Title:	Tic Tac Toe 3 2
Focus:	Tic Tac Toe

Materials:

Enlarged Tic Tac Toe Boards—one for each pair of students (duplicate on 11" x 17" if you can

Prizes (these can be time, a leadership role, opportunities to be the "teacher"

If you finish Tic Tac To early, you can have students select a favorite game from the past few days and play that as well.

Opening

State the objective

Today we are going to have fun playing a game.

Content (the "Meat")
Activity
Tic Tac Toe

- 1. Divide students in groups of 2
- 2. Give each pair a Tic Tac Toe Board (enlarge from this lesson plan)
- 3. In order to place an "X" or and "O" in a space, students must be able to complete the math problem in the space
- 4. Students should apply "paper, rock, scissors" to determine who will go first (best 2 out of 3)
- 5. Winner receives a High Five

	Closing
	Review
Say:	
•	Please recap what we did today.

Reflection (Confirm, Tweak, Aha!)

Did we achieve our objectives?

- 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.



Tic Tac Toe Math—2nd Grade

Order the numbers below from the largest to the smallest (place the largest number on top and the smallest number on bottom. 634 691 637 673	Complete this problem: 681 +242	Separate these numbers into odds and evens: 724 515 723 488 610 839
Complete this problem 532 -243	Each of the numbers below has a 4 in it, either in the ones, tens or hundreds place. Match the 4 to the place value it represents. 471 ones 714 tens 417 hundreds	Write the following number in expanded notation: 479
Write this number that is written in expanded notation in the standard form. 800 + 20 + 3	What are the next four figures in this pattern? Write them on the lines.	Write a number sentence for this story problem. Susie has sold 385 cookies boxes. She plans to sell another 149 this weekend. How many will she have sold in all?



Component	Math
Grade Level:	2 nd Grade
Lesson Title:	CJTTMU Review
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

Choice of 5 activities

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

Countdown

Just Subtract

Tic Tac Toe #1

Tic Tac Toe #2

Movin' On Up

Up, Up and Away

Closing

Review

Say:

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

Reflection (Confirm, Tweak, Aha!)

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