

Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	Count Down and Number Hunt
Focus:	Subtraction

Materials:		
White boards	Vocabulary Notebooks	Countdown cards from yesterday
Crayolas	12-sided dice for each pair	
Socks	Number Hunt Work Sheet	

## Opening

## State the objective

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

## Gain prior knowledge by asking students the following questions

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  Make a design that has a minimum of 5 triangles.  Fact Practice	*Activity → Teachable Moment(s) throughout  During the lesson check in with students repeatedly.
<ol> <li>Divide students into pairs.</li> <li>Each pair needs a Number Hunt sheet (attached to this lesson plans).</li> <li>Player rolls two, 12-sided dice.</li> <li>Player adds or subtracts the two numbers.</li> <li>If the number is not yet covered, then player may cover the number.</li> <li>Next player repeats steps 1-3.</li> <li>Winner is determined by who has the most numbers covered.</li> </ol>	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: obtuse angle	It is important to review academic math vocabulary
<b>Description:</b> Review the information that you shared with students yesterday about the different types of angles. Remind them that an obtuse angle is between a right angle (L) and a straight line ( ).	often throughout the day Complete the Vocabulary notebook for each word.



Students should review the entry on the word equation from yesterday and determine if they need to make and additions or changes.

**Vocabulary Notebook Sample:** 

New Word	My Description
Obtuse angle	Angle that is greater than a right angle but not a straight line
Personal Connection	Drawing
My neighbor's yard is at an obtuse angle to my front yard.	> 90° < 180° Obtuse Angle

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 Count Down

**Demonstrate**: Review the game from yesterday. Have the students share how to play the game. Once they have demonstrated that they know how to play the game, have them play with a partner.

**Materials:** Deck of Count Down cards (number 11-30) for each group of 2-3 students. White board for each student

#### Directions:

- 1. Each student writes the number 99 at top of his/her white board
- 2. All Count Down cards are placed face down in the center of the group.
- 3. Player one draws the top card and subtracts that amount from 99 (or the total remaining from previous subtractions)
- 4. Player two then repeats.
- 5. Play continues until 0 is reached.

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.

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



- 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>



## **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



Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	Equal 10
Focus:	Equalities

Materials:

White boards Decks of cards Diamond Cards (from yesterday)

Crayolas Socks Vocabulary Notebooks

## **Opening**

## State the objective

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

## Gain prior knowledge by asking students the following questions

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 each clue then select the correct shape. I have 4 sides. Opposite sides are equal. All 4 sides are equal. Which shape am I? **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: acute angle

**Description:** Review the information that you shared with students yesterday about an acute angle. Have students identify more things in the room or outdoors that have or form an acute angle.

Have students share the Vocabulary Notebooks in pairs, discussing the word, making any additions or changes.

**Vocabulary Notebook Sample:** 

New Word	My Description
Acute angle	An angle less than 90°
Personal Connection	Drawing *
The edges of the triangle create two acute angles	

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 Equal 10

**Review** the game from yesterday. Have the children explain how to play the game. When you are satisfied that they understand how to play the game, then let them form small groups.

Equal 10

**Materials:** Deck of Diamond Cards for each group of 2-3 students **Directions:** 

- 1. Turn all of the cards face down in the center of the group.
- 2. Each person draws 5 cards from the pile and then the remaining cards are placed in a single stack, face down.
- 3. First player turns over the first card and places it up in the center of the group.
- 4. First player then looks at his/her own cards and looks for a card that can match to the center card by placing a number next to the side where the two numbers would equal 10. (Example: one side has an 8 the player places a card with a 2 on it)
- 5. If player cannot make a match, then he/she draws a card and play moves on to the second player. If there is a match, play moves to the second player and the first player does not have to draw a card.

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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#### 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?

- 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.



Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	Just Roll 'Em
Focus:	Place Value

Materials:

White boards Vocabulary Notebooks

Crayolas 9-sided dice
Socks Hundreds Chart

## **Opening**

## State the objective

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

## Gain prior knowledge by asking students the following questions

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

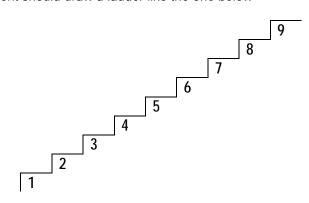
Copy each of the shapes below. Draw at least one line of symmetry on each one.



#### **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

# \*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.



numbers in the ladder, writing the sum to the right of the number

#### Math Vocabulary

Word for Today: symmetry

**Description**: Discuss the information from yesterday regarding symmetry. Discuss the ways that you drew lines of symmetry in the problem of the day. Ask students to review the information they included in the Notebook from yesterday and make additions as necessary.

**Vocabulary Notebook Sample:** 

New Word	My Description
symmetry	Same on two sides
Personal Connection	Drawing
The line of symmetry goes down the middle, trying to make it the same on both sides.	

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 Roll 'Em

**Remind** students of the activity that they did yesterday. Encourage students to discuss the process and the key learnings.

**Explain** that today you are going to play the game again.

#### Just Roll 'Em

Materials: two 9-sided dice of different colors for each team

Hundreds Chart

#### Directions:

- 1. Designate one of the dice ones place and the other tens place (Green = ones, red = tens)
- 2. Player 1 rolls the dice and finds the number on the hundreds chart and marks the number that he/she has rolled
- 3. Player 2 repeats the process
- 4. Game is over when all the numbers (except 1-9 and 100) are marked out or covered

Note: If you don't have 9-sided dice, you can use two decks of cards with 10s, face cards and jokers removed.

- 1. Divide students into pairs
- 2. Give each pair 1 sheet of 1/4" grid paper and a string of paper clips
- 3. Students measure 3-4 items, drawing the item, writing a number sentence and labeling the perimeter for each item measured.

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

- 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.



Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	Just Roll 'Em
Focus:	Place Value

Materials:

White boards Vocabulary Notebooks 2 9-sided dice for each pair

Crayolas

Dice

Socks Hundreds Chart (attached)

## **Opening**

## State the objective

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

## Gain prior knowledge by asking students the following questions

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 Write your last name in all capital letters. Which letters have at least one line of symmetry?	*Activity >> Teachable Moment(s) throughout
Explain your answer. You may want to do the Problem of the Day after the vocabulary lesson today.	During the lesson check in with students repeatedly.
Fact Practice	Check in about what is happening and what they are
Spokes on a Wheel  1 Divide students into pairs	thinking

- 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)

Content (the "Meat")

- 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.

## Take advantage of any teachable moments. Stop the class and focus on a student's key learning or understanding. Ask open-

the group is thinking. When possible, engage students in a "teach to learn"

determine what the rest of

ended questions to

opportunity and have the student become the teacher.

## Math Vocabulary

Word for today: symmetry

Description: Symmetry is when one shape becomes exactly like another if you flip, slide

or turn it. When you flip a shape you turn it over:

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



You can also slide something over and it will be in symmetry:



You can flip something (reflect)



The line of symmetry "slices" the two objects so that both sides are alike.

Students complete the Vocabulary Notebook

**Vocabulary Notebook Sample:** 

New Word	My Description
Symmetry	Something that looks the same on both sides, line of symmetry is in the middle
Personal Connection	Drawing
We did a drawing and had to identify the line of symmetry.	

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 Roll 'Em

**Demonstrate** how to play the game using volunteers to come and learn how to play while they are teaching others.

Materials: two 9-sided dice of different colors for each team

**Hundreds Chart** 

#### Directions:

- 1. Designate one of the dice ones place and the other tens place (Green = ones, red = tens)
- 2. Player 1 rolls the dice and finds the number on the hundreds chart and marks the number that he/she has rolled
- 3. Player 2 repeats the process
- 4. Game is over when all the numbers (except 1-9 and 100) are marked out or covered

**Note:** If you don't have 9-sided dice, you can use two decks of cards with 10s, face cards and jokers removed.

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?

- 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.



## **Hundreds Chart**

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
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	Math Fact Match
Focus:	Operations

Materials:

White boards Vocabulary Notebooks

Crayolas deck of cards, no face cards or jokers

Socks Math Fact Cards

### Opening

## State the objective

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

## Gain prior knowledge by asking students the following questions

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

Create a three-column page

Label one column "circle" the second acute angle, the third obtuse angle

Make a list of items (you can draw them) in your classroom that are shaped like a circle, an acute angle and an obtuse angle.

#### **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.

## Math Vocabulary

Word for Today: isosceles triangle

Description: An isosceles triangle is any triangle that has at least two sides that are the same length. All of these are isosceles triangles:







## \*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 open-ended 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.

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



Have student complete his/her Vocabul	students acting out an equation)  Vocabulary Notebooks can be made	
New Word	My Description	from ½ of a composition book
Isosceles triangle	A triangle with two equal sides and angles	
Personal Connection  I have an isosceles triangle on my wall.	Drawing	
Δ.	-11-11-	Faces and have decided as a second

# Activity Math Fact Match

**Demonstrate**: Demonstrate how the game is played following the directions below. Have volunteers come to the front and demonstrate for the other students. Ask them to each teach one person.

Materials: Deck of Math Fact Cards

**Directions:** 

- 1. Shuffle the cards and divide them evenly between the players (2 is best).
- 2. Simultaneously, the two players turn over the top card in his/her deck.
- 3. Both players calculate the answer to the problem and calls out the answer
- 4. Player with the larger number wins both cards.
- 5. If the answers are a tie, then another round is 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:	
<ul> <li>Please recap what we did today.</li> </ul>	
<ul> <li>Did we achieve our objectives?</li> </ul>	
	Debrief
Thurs Whats	

#### 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?

- 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



## **Math Fact Cards**

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



18	17	16	16
<u>-9</u>	<u>-6</u>	<u>-9</u>	<u>-3</u>
15	15	14	14
<u>-8</u>	<u>-5</u>	<u>-5</u>	<u>-2</u>
13	13	10	11
<u>-6</u>	<u>-5</u>	<u>-6</u>	<u>-6</u>
11	12	12	10
<u>-8</u>	<u>-4</u>	<u>-6</u>	<u>-4</u>
9	8	5	4
<u>-7</u>	<u>-3</u>	<u>-1</u>	<u>-3</u>



often throughout the day

Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	Equal 10
Focus:	Addition

Materials:

White boards Decks of cards

Crayolas Vocabulary Notebooks

Socks Diamond Cards (attached at the end of plan)

## **Opening**

## State the objective

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

## Gain prior knowledge by asking students the following questions

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")	Content (the "Meat")				
Problem of the Day  How is a and a alike? How are they different?  Share your answer with a peer.  Fact Practice	*Activity → Teachable Moment(s) throughout  During the lesson check in with students repeatedly.				
<ul> <li>Addition War</li> <li>Divide students into pairs. Give each pair a deck of cards without face cards and jokers.</li> </ul>	Check in about what is happening and what they are thinking.				
<ul> <li>Shuffle the deck and divide the cards evenly between the two players.</li> <li>On go, the players turn over the cards at the same time.</li> <li>Students add the 2 numbers that have been turned up.</li> <li>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.</li> <li>At the end of round, students may reshuffle the pile of cards that they have.</li> <li>Play can continue until one player has all cards or time has called.</li> </ul>	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: acute angle	It is important to review academic math vocabulary				

**Description**: An acute angle is one that is more than '0" but less than 90°. A 90° angle is



called a right angle. It looks like the letter L An Acute angle would be less than the L, it would look more like this in a triangle:

Ask children to look around the room and locate things that form an acute angle. Ask for volunteers to come up and form an acute angle. They can start with a right angle and then close it up to an acute angle.

Vocabulary Notebook Sample:

New Word	My Description
Acute angle	An angle that is less than 90°
Personal Connection	Drawing
The Triscut has several acute angles.	

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 Equal 10

**Materials:** Deck of Diamond Cards for each group of 2-3 students **Directions:** 

- 1. Turn all of the cards face down in the center of the group
- 2. Each person draws 5 cards from the pile and then the remaining cards are placed in a single stack, face down.
- 3. First player turns over the first card and places it up in the center of the group
- 4. First player then looks at his/her own cards and looks for a card that can match to the center card by placing a number next to the side where the two numbers would equal 10 (Example: one side has an 8 the player places a card with a 2 on it)
- 5. If player cannot make a match, then he/she draws a card and play moves on to the second player. If there is a match, play moves to the second player and the first player does not have to draw a card.

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.



- 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.



## **Diamond Cards**

	1			4			7	
2	$\times$	2	8		7	3		8
	5			<u>9</u> 1			4	
	5			1			6	
3	$\times$	7	3	$\times$	3	7	$\times$	<u>6</u>
	<u>6</u>			4			7	
	4			6			3	
2	$\times$	8	2	$\times$	2	8		2
	<u>6</u>			8			5	
	4			2			5	
4	$\times$	1	<u>9</u>	$\times$	1	<u>9</u>	$\times$	3
	<u>9</u>			5			5	
	1			5			5	
5	$\times$	4	<u>6</u>	$\times$	3	7	$\times$	<u>6</u>
	<u>9</u>			7			7	



	1			3			3	
2	$\times$	<u>9</u>	1		5	5	$\times$	8
	5			8			7	
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						/		
	6	$\longrightarrow$		5	$\longrightarrow$		2	$\rightarrow$
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8	$\times$	4	<u>6</u>	$\times$	3	7	$\times$	8
	<u>6</u>			<u>9</u>			5	
	<u>6</u> 4			9 1			5	
7	$\times$	8	2	$\times$	<u>6</u>	4	$\times$	<u>6</u>
	<u>9</u>			8			7	
	1	$\nearrow$		2	$\nearrow$		3	
4	$\times$	5	5	$\times$	9	1	$\times$	5
	<u>9</u>			<u>6</u>			3	



Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	Math Fact Match
Focus:	Operations

Materials:

White boards Vocabulary Notebooks
Crayolas Double 9 Dominoes
Socks Math Fact Cards

## Opening

## State the objective

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

## Gain prior knowledge by asking students the following questions

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

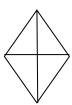
How can you tell that you are on the right track for solving the problem?

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

## Content (the "Meat")

#### Problem of the Day

Look at the kite below. How many angles are there?



## Fact Practice

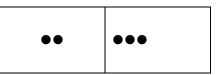
## **Spots and Dots**

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: isosceles triangle

**Description:** Review with the students the information that you gave them yesterday about an isosceles triangle. Go for a walk outdoors and find right angles (sidewalk corners, lines that come together on the basketball court, etc.), obtuse or acute angles as well. Have groups of children form the angle—say four students on each side, and then have a row of children the base of the triangle. In this way they are forming a variety of isosceles triangles.

When you go back to the classroom have students check the Vocabulary entry from yesterday and decide if they want to add to it.

Have students share the Vocabulary Notebooks in pairs, discussing the word, making any additions or changes.

**Vocabulary Notebook Sample:** 

New Word	My Description
Isosceles triangle	A triangle with 2 equal sides and angles (not equilateral)
Personal Connection	Drawing
That park is in the form of an isosceles triangle	

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 Math Fact Match

**Review:** Review how to play the game children learned yesterday.

Math Fact Match

Materials: Deck of Math Fact Cards

Directions:

1. Shuffle the cards and divide them evenly between the players (2 is best).

- 2. Simultaneously, the two players turn over the top card in his/her deck.
- 3. Both players calculate the answer to the problem and calls out the answer.
- 4. Player with the larger number wins both cards.
- 5. If the answers are a tie, then another round is 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?

- 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.



## **Double 9 Dominoes**

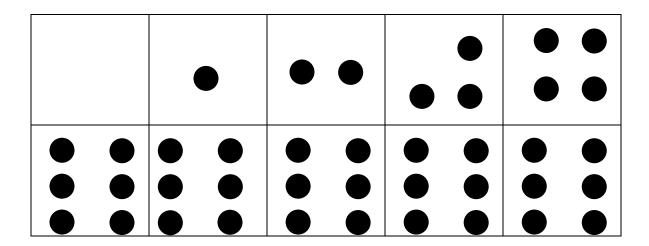
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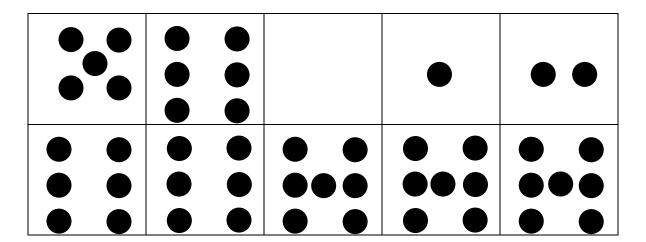
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Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	Count Down
Focus:	Subtraction

Materials:

White boards Vocabulary Notebooks

Crayolas Cards

Socks Count Down Cards

## **Opening**

## State the objective

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

## Gain prior knowledge by asking students the following questions

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")				
Use as n	Problem of the Day nany different shapes as you can to draw a robot. (Use at least 4 different shapes)	*Activity >> Teachable Moment(s) throughout			
Target	Fact Practice	During the lesson check in with students repeatedly.			
1. I 2. I	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.	Check in about what is happening and what they are thinking.			
4.	Turn up a 10 <sup>th</sup> card which will be to the side and becomes the target number (aces count as 1)	Take advantage of any teachable moments.			
5. I	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.	Stop the class and focus on a student's key learning or understanding. Ask open-			
7. /	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	ended questions to determine what the rest of the group is thinking.			
8. <i>i</i>	4. After one player finishes his/her turn, then the cards taken are replaced by cards from the remaining deck.	When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.			
9. 1	Player with the most cards at the end of the game win.	student become the teacher.			
	Word for today: obtuse angle  Description: Like the acute angle an obtuse angle has a relationship with a right angle, or the  It is important to revious academic math voca often throughout the				
	otuse angle is any angle that is greater than 90° but less than 180°. 180° is a straight	Complete the Vocabulary			



line, so if you created a straight angle (line) then it is more than an obtuse angle. Ask children to come up and form right angles, acute angles, and an obtuse angle. Also have students look for obtuse angles in the classroom.

Students should complete the Vocabulary Notebook.

Vocabulary Notebook Sample:

New Word	My Description	
Obtuse angle	An angle bigger than a right angle and small than a straight line	
Personal Connection	Drawing	
Can you find an obtuse angle in your yard?	> 90° < 180° Obtuse Angle	

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 Count Down

**Explain** to students that they are going to have an opportunity to play a new game. **Demonstrate** how to play the game choosing volunteers to come and demonstrate.

#### **Count Down**

**Materials**: Deck of Count Down cards (number 11-30) for each group of 2-3 students. White board for each student

#### Directions:

- 1. Each student writes the number 99 at top of his/her white board
- 2. All Count Down cards are placed face down in the center of the group.
- 3. Player one draws the top card and subtracts that amount from 99 (or the total remaining from previous subtractions)
- 4. Player two then repeats.
- 5. Play continues until 0 is reached.

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?

- 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>



## **Count Down Cards**

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



students creating a right angle,

Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	99
Focus:	Mental MathAddition

Materials:

additions or changes.

White boards Vocabulary Notebooks

Crayolas dice (6-sided and 12-sided for each pair)
Socks deck of cards for every 2-3 students

## **Opening**

## State the objective

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

## Gain prior knowledge by asking students the following questions

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 the capital letters that have at least 1 right angle in them.	*Activity → Teachable Moment(s) throughout
Fact Practice Fact Family	During the lesson check in with students repeatedly.  Check in about what is
A Fact Family is 3 numbers which have a relationship in addition and subtraction. For example, the number 9, 4, and 13 have a particular relationship in math. This family has four members: $9 + 4 = 13$	happening and what they are thinking.  Take advantage of any teachable moments.
4 + 9 = 13 13 - 9 = 4 13 - 4 = 9 Students should roll 2 dice and create a Fact Family by writing the members of the family on	Stop the class and focus on a student's key learning or understanding. Ask open-ended questions to determine what the rest of the group is thinking.
the white board. Student should roll a total of 5 times, creating 5 Fact Families	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: right angle  Description: A right angle is shaped like an L. You can see a right angle when you lay your hand on a table and form an L along the thumb and pointer finger. Look at the letters of the alphabet and determine which of them have a right angle—look at both capital and lower	academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.
case letters. Have students find other right angles throughout the room and identify them. Have students share the Vocabulary Notebooks in pairs, discussing the word, making any	When possible, have students experience the word. (Ex. 4



Vocabulary Notebook Sample:	multiple students acting out an	
New Word	My Description	equation.)
Right angle	An angle in the shape of a capital L	Vocabulary Notebooks can be made from ½ of a composition book.
Personal Connection	Drawing	
The wall of the house is at a right angle to the foundation		

Activity 99

Share the rules of 99 with the students

Each card counts for its face value except:

9's simply allow the player to pass, they are neither added to or subtracted from the total.

10's are a – 10, requiring the player to subtract 10 from the total.

the joker is "99" (you can play after the joker if you have a 9, a 10, or another joker) Aces count as 1 and all face cards are 10.

**Demonstrate:** Show kids how to play this game. Do it by having all of the cards be open and face up

### Directions:

- 1. Each player is dealt 3 cards.
- 2. The first player plays a card and states the value of the card.
- 3. First player draws a card, keeping his/her hand at 3 cards.
- 4. The second player plays a card and states the value of the two cards added together (unless the second player plays a 9, a 10 or a joker). Second player draws a card, keeping his/her hand at 3 cards.
- 5. For example, if player 1 plays a 7, he/she would say 7. Draws a card. If the second player plays an 8, he/she would say 15. Draws a card. If a third player plays a ten, he/she would say 5, and so on. Draws a card.
- 6. The player to reach 99 with **NO OTHER PLAYER** being able to play a card, wins. Remember, after the pile reaches 99, players can still play a 9, 10 or joker.

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:		
<ul> <li>Please recap what we did today.</li> </ul>		
<ul> <li>Did we achieve our objectives?</li> </ul>		
	Debrief	
T1 14/1 1		

#### 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?



- 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.



Complete the Vocabulary

Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	99
Focus:	Addition and Subtraction

Materials:

White boards Vocabulary Notebooks

Crayolas Copies of activities at end of Lesson Plan Socks Deck of cards, no 10s, face cards, or jokers

## **Opening**

## State the objective

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

## Gain prior knowledge by asking students the following questions

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

room and see if they can find other right angles (not the ones they found yesterday). Ask students

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
a ⊙	= 5 and a ♥ = 3, what would be the total of the problem below:	Moment(s) throughout  During the lesson check in with students repeatedly.
	⊕ + ⊕ + ♥ + ♥ + ⊕ +	
	Fact Practice	Check in about what is
	Bump It Up! Add A Zero	happening and what they ar
1.	· ·	thinking.  Take advantage of any teachable moments.
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.	Stop the class and focus on
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
5.	It is not the other person's turn to do the same.	understanding. Ask open- ended questions to determine what the rest of the group is thinking.
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.	When possible, engage
8.	Example: Player draws a 7 and a 4. Total is 11. Multiply by 10 (add the zero) equals	students in a "teach to learn
	110. Next turn, player draws a 3 and a 2 which totals 5. Multiply by 10 and I now add 50	opportunity and have the
	to 110 for a total of 160.	student become the teacher
	Math Vocabulary	It is important to review
ord f	for Today: right angle	academic math vocabulary
<b>Description:</b> Review the information that you shared with students yesterday. Look around the		often throughout the day.



to identify the different shape that have at least one right angle.

Review the entry from yesterday. Have students discuss in pairs and determine if they want to make any changes in the Vocabulary Notebook entry.

Vocabulary Notebook Sample:

New Word	My Description
Right angle	And angle that looks like a capital L with 90° in the L
Personal Connection	Drawing
He turned the corner at a right angle	

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 99

Remind the students of the rules of 99.

Each card counts for its face value except:

9's simply allow the player to pass, they are neither added to or subtracted from the total. 10's are a – 10, requiring the player to subtract 10 from the total.

the joker is "99" (you can play after the joker if you have a 9, a 10, or another joker). Aces count as 1 and all face cards are 10.

**Demonstrate:** Show kids how to play this game. Do it by having all of the cards be open and face up.

#### **Directions:**

- 1. Each player is dealt 3 cards.
- 2. The first player plays a card and states the value of the card.
- 3. First player draws a card, keeping his/her hand at 3 cards.
- 4. The second player plays a card and states the value of the two cards added together (unless the second player plays a 9, a 10 or a joker). Second player draws a card, keeping his/her hand at 3 cards.
- 5. For example, if player 1 plays a 7, he/she would say 7. Draws a card. If the second player plays an 8, he/she would say 15. Draws a card. If a third player plays a ten, he/she would say 5, and so on. Draws a card.
- 6. The player to reach 99 with **NO OTHER PLAYER** being able to play a card, wins. Remember, after the pile reaches 99, players can still play a 9, 10 or joker.

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	
Ciosing	

#### 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?

- 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.



Component:	Math
Grade Level:	3 <sup>rd</sup> Grade
Lesson Title:	Tic Tac Toe
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"

## **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.
- 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—3<sup>rd</sup> Grade

Order the numbers below from the largest to the smallest (place the largest number on top and the smallest number on bottom.  2,987 2,889 3,010 2,991	1,423 +2,678	Jordan weighs 123 pounds. His older brother weighs 53 pounds more. How much does his older brother weigh?
1,023 -968	Judy's first class begins at 9:00 a.m. It is a double period which last for 1 hour and 40 minutes. What time is it when Judy's first class is over?	Write the following number in expanded notation: 71,246
Write this number that is written in expanded notation in the standard form. $70,000 + 8,000 + 200 + 60 + 9$	Josh goes to the store with a \$20 bill. He picks up several items and takes them to the check stand. When the items are totaled and the tax asked, Josh has spent \$13.47. How much change will Josh have?	Write a number sentence for this story problem. Julie has sold 312 candy bars during week 1. During week 2 she sold 219 candy bars. During week three how many candy bars will she need to sell to reach her goals of 750?