Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Writing Number Sentences
Focus:	Math

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?

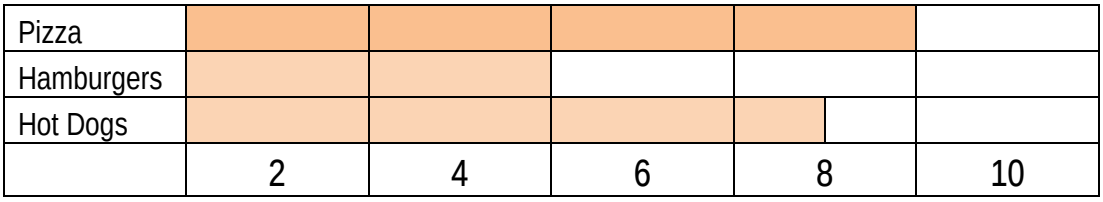
How can you tell that you are on the right track for solving the problem?

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

Content (the "Meat")

Problem of the Day

Below is a bar graph showing the students' favorite food. Write a number sentence that will show the total number of students in the classroom.



8 + 4 + 7 = 19

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

*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

110. Next turn, player draws a 3 and a 2 which totals 5. Multiply by 10 and I now add 50 to 110 for a total of 160.

Math Vocabulary

Word for Today: number sentence

Description: A number sentence is an equation that indicates both the quantity (represented in the numerals) and the operation (+ - X ÷) that is to be applied to those numbers. Example: 5 + 3 = 8 and 8 – 5 = 3 are two number sentences using the same 3 numerals.

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
Number sentence	A math problem that is written in equation form
Personal Connection	**Drawing**
Please write a number sentence to how 5 - 2 cookies.	

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

Writing Number Sentences

Writing number sentences is essential to solving problems correctly. Write the correct number sentence for each problem, and then mark the correct answer. Explain the ÷ sign.

Problem: Each hour a dolphin swims 5 miles. How many hours does it take for the dolphin to swim 20 miles? (4 hours) **20 ÷ 5 = 4 hours**

A. 15 B. 25 C. 3 D. 4

Problem: Each mother seagull has 3 baby chicks. There are 18 chicks in all. How many mother seagulls are there? (6 mother seagulls)

18 ÷ 3 = 6 mother seagulls

F. 5 G. 21 H. 6 J. 15

Problem: Lorna had 16 dolls. She gave an equal number of dolls to 4 friends. How many dolls did each friend get? (4 dolls)

16 ÷ 4 = 4 dolls

A. 3 B. 4 C. 12 D. 20

Problem: Paul makes a pile of 26 cards. Then he gives 7 of them to his sister. How many cards does he have left? (19 cards)

19- 7 = 19 cards

F. 5 G. 21 H. 6 J. 15

Problem: You have 15 spools of thread. How many groups of 3 spools can you make? (5 groups)

15 ÷ 3 = 5 groups

A. 3 B. 4 C. 6 D. 5

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!)

- 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

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Equation Writer
Focus:	Math vocabulary, subtraction, addition

Materials:

White boards
Crayolas
Socks
Vocabulary Notebooks
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 subtraction problem written below. To do this problem correctly, will you need to regroup? Explain your answer.

326
-194

Fact Practice

Target

1. Divide students into trios
2. Each trio needs a deck of cards without face cards and jokers
3. Place the cards face up in a TicTac Toe Grid
4. Turn up a 10th card which will be to the side and becomes the target number (aces count as 1)
5. 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.
6. Each card may be used only one time in the equation
7. As the cards are being picked up, the player must say the equation aloud—for

*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.

example if the target card is 10, then I could say 6 + 4 = 10, and pick up the 6 and the 4.

8. After one player finishes his/her turn, then the cards taken are replaced by cards from the remaining deck
9. Player with the most cards at the end of the game wins.

Math Vocabulary

Word for Today: equation

Description: An equation is a number sentence that has numerals and operations that are equal on both side of the = sign. Ex.: 4 + 2 = 6 is a simple equation.

Students should complete the Vocabulary Notebook

Vocabulary Notebook Sample:

New Word	My Description
equation	A number sentence to show a math problem
Personal Connection	**Drawing**
Write the number sentence for that problem.	

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

Equation Writer

Explain to students that they are going to have an opportunity to write 4 equations—two each for addition and subtraction.

Demonstrate how students will use cards to randomly demonstrate numbers. Deal yourself 8 cards. (Decks will not have 10s, face cards, or jokers) You may use all or some of the cards. For example, if I draw a 7, 3, 2, 2, 1, 6, 8, 9, I could make the problem 732 + 126 = 858, or I could subtract saying 732 - 126 = 606; or 621 + 798 = 1,419 or 395 – 221 = 174.

Player can only make 1 equation with each draw of the cards.

At the end of the play, the answers from all 4 equations will be totaled together, and the winner is the player with the highest total.

1. Divide students into pairs
2. Give each pair a deck of cards (10s, face cards, and jokers removed) and have them create the equations together and find the total of the answers
3. When all have finished, compare the grand totals for each team

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!)

- 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.

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Exactly 100
Focus:	Math vocabulary, basic operations, patterns

Materials:	
White boards	Vocabulary Notebooks
Crayolas	dice (6-sided and 12-sided for each pair)
Socks	

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 Study the shapes and determine what the pattern is. Copy the pattern and complete the pattern by adding the next 5 shapes, replacing the question marks. ☼ ╦ ╦ ♪ ☼ ╦ ? ? ? ? ?	*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.
Fact Practice Fact Family 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 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 the white board. Student should roll a total of 5 times, creating 5 Fact Families	
Math Vocabulary Word for Today: number sentence	It is important to review academic math vocabulary often throughout the day.

Consult 4 Kids Lesson Plans

Description: A number sentence is an equation that indicates both the quantity (represented in the numerals) and the operation (+ - X ÷) that is to be applied to those numbers. Example: 5 + 3 = 8 and 8 – 5 = 3 are two number sentences using the same 3 numerals.

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

Vocabulary Notebook Sample:

New Word	My Description
Number sentence	A number sentence is how you write a problem
Personal Connection	**Drawing**
The number sentence is 5 + 6 = 11.	

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

Exactly 100

Demonstrate:

On the white board, draw 3 columns. Label the first >100, the center one 100, and the last one < 100

Show students 2 12-sided dice and 2 6-sided dice.

Explain that you will roll the 4 dice one time. Then ask students to help you create three number sentences. One that equals less than 100, one that equals more than 100, and if possible, one that equals 100 exactly. Example:

Player rolls a 5, 5, 1, and 4

1 [5 (5 x 4)]

(5 x 1) + (5 – 4) + 6

5 (5 x 4) +1 = 101

Playing the game

1. Divide students into pairs
2. Give each pair two-12-sided dice and two 6-sided dice.
3. Player #1 rolls all four dice.
4. Player tries to make an equation, using addition, subtraction, multiplication, and/or division, which will fit in each of the columns above, using the same numbers.
5. Player scores one point for >, one point for <, and 3 points for exactly 100.
6. Highest score 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?

Reflection (Confirm, Tweak, Aha!)

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

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Expanded Notation
Focus:	Math vocabulary, basic operations, number notations

Materials:	
White boards	Vocabulary Notebooks
Crayolas	cards
Socks	

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 Sometimes we read story problems that must be solved by the creation of a number sentence. Today we are going to write a story problem that the following number sentence represents. 13 + 9 =	*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.
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.	

Consult 4 Kids Lesson Plans

Math Vocabulary

Word for Today: expanded notation

Description: Expanded notation is a way to write a number that represents each numeric value of the place the numeral is in. Example: 7,324 in expanded notation is 7000 + 300 + 20 + 4. In expanded notation, the numerals to the right of the number are represented by 0 which holds the place of the other numbers.

Have students complete his/her Vocabulary Notebook.

Vocabulary Notebook Sample:

New Word	My Description
Expanded notation	Stretching a number out so you can see its parts
Personal Connection	**Drawing**
The assignment was to write the numbers in expanded notation.	

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

S-T-R-E-T-C-H It Out!

Demonstrate: Numbers can be written in expanded notation. This is helpful for students when they are learning about place value. Sometimes the numeral 4 is much more than simply ☺ ☺ ☺ ☺ = 4. In the number 41, the 4's value is 40, in 411, the 4's value is 400, and so on. Today we are going to write numbers in expanded notation.

Model: 5, 368 = 5,000 + 300 + 60 + 8

1. Divide students into pairs, giving each pair 4 6-sided dice (9 sided would be perfect if you have them)
2. Student rolls a number and decided how to arrange the die so the number can be read. For example, if the roll is 4, 3, 6, and 7, the number could be 4,367 or any other arrangement of those numbers.
3. Students write the number and then write the number in expanded notation. 4,367 would become 4,000 + 300 + 60 + 7 = 4,367
4. Pair should roll 10 different numbers, writing the number in both the standard and expanded notation formats.
5. Pairs then select one number to share with the group in both formats.

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!)

- 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.

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Expand and Contract
Focus:	Math vocabulary, basic operations, number notations

Materials:	
White boards	Vocabulary Notebooks
Crayolas	Double 9 Dominoes
Socks	four 6-sided dice per pair

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

With the digits at the bottom of this problem, write three numbers, the largest, the smallest, and one in the middle. When you have completed this, write the numbers in expanded notation. What are all of the possible values of 8? (8,000, 800, 80, and 8)

6 3 1 8

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 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.

Consult 4 Kids Lesson Plans

Math Vocabulary

Word for Today: expanded notation

Description: Expanded notation is a way to write a number that represents each numeric value of the place the numeral is in. Example: 7,324 in expanded notation is 7000 + 300 + 20 + 4. In expanded notation, the numerals to the right of the number are represented by 0 which holds the place of the other numbers.

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

Vocabulary Notebook Sample:

New Word	My Description
Expanded notation	Writing numbers so you can see hundreds, tens, and ones separated
Personal Connection	**Drawing**
Can you write 649 in expanded notation?	

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

Expand and Contract

Demonstrate: Write the following numbers on the board.

6,731, (4,000 + 900 + 30 + 1), 8,017 and (5,000 + 000 + 40 + 9)

Ask students to expand the numbers that are not in expanded notation already, and contract the numbers that are already in expanded notation.

Write each number in BOTH formats as students provide the answers

1. Divide students into pairs
2. Give each pair a deck of cards with the 10s, face cards and jokers removed
3. Ask students to draw four cards, arrange the numerals to form a 4-digit number and then to write that number in both the standard and expanded notation format
4. Students should create 10 numbers
5. Invite pairs of students to share the numbers they generated with a pair of peers

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.

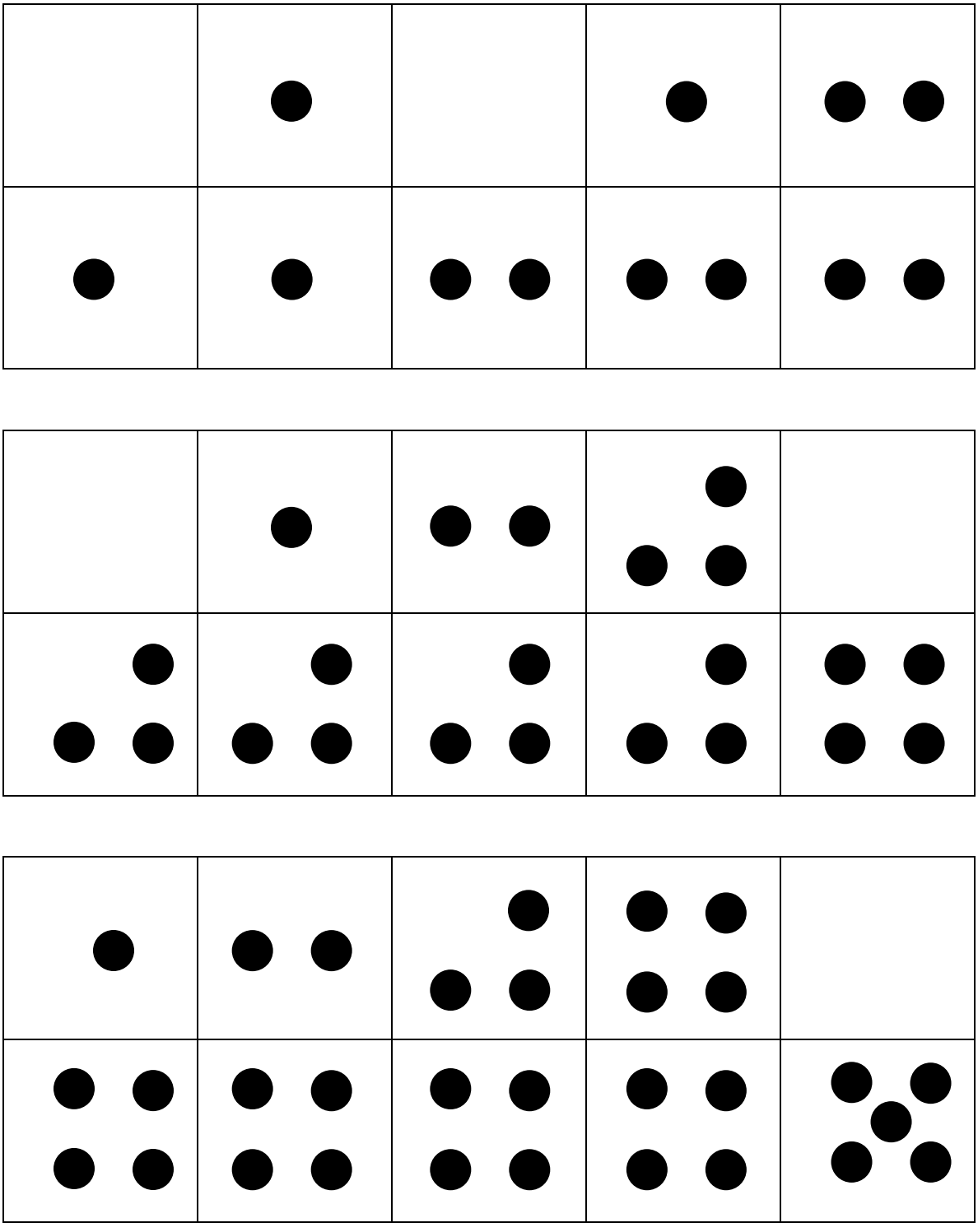
Closing
Review Say: • Please recap what we did today. • Did we achieve our objectives?
Debrief Three Whats Ask the following three what questions: What was your key learning for the day? What opportunities might you have to do this same thing in the "real world"? What advice would you give to a "new" student getting ready to do this activity?

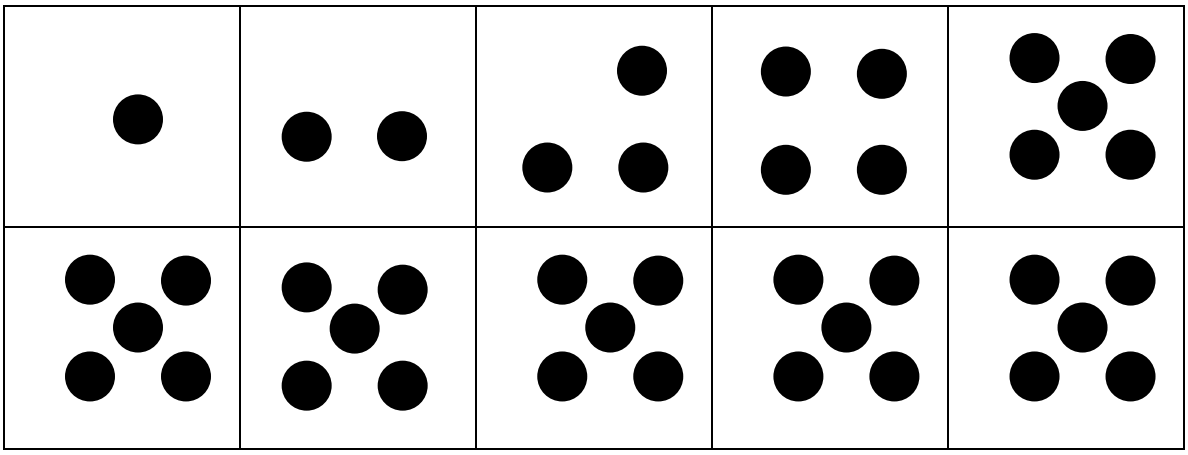
Reflection (Confirm, Tweak, Aha!)

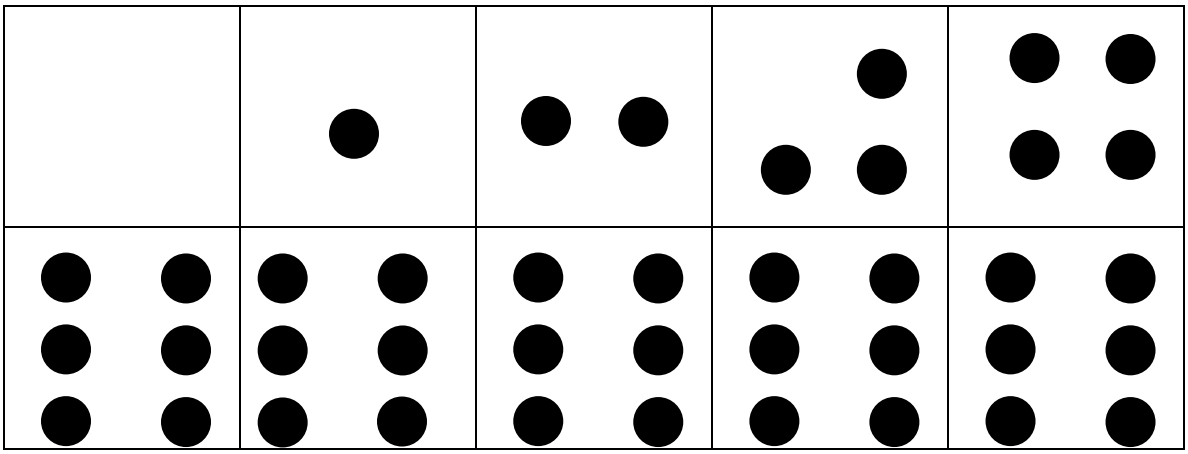
- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them.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

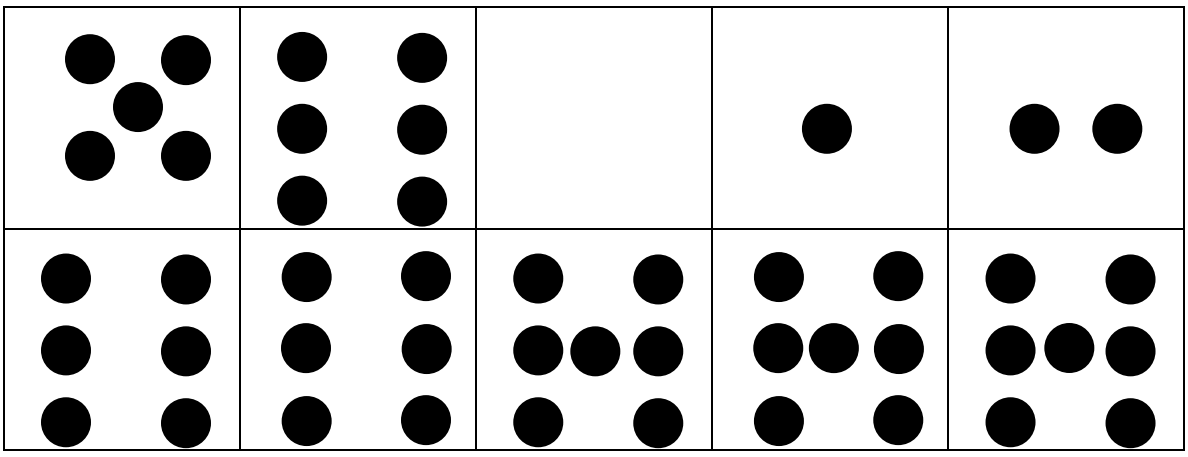
Consult 4 Kids Lesson Plans

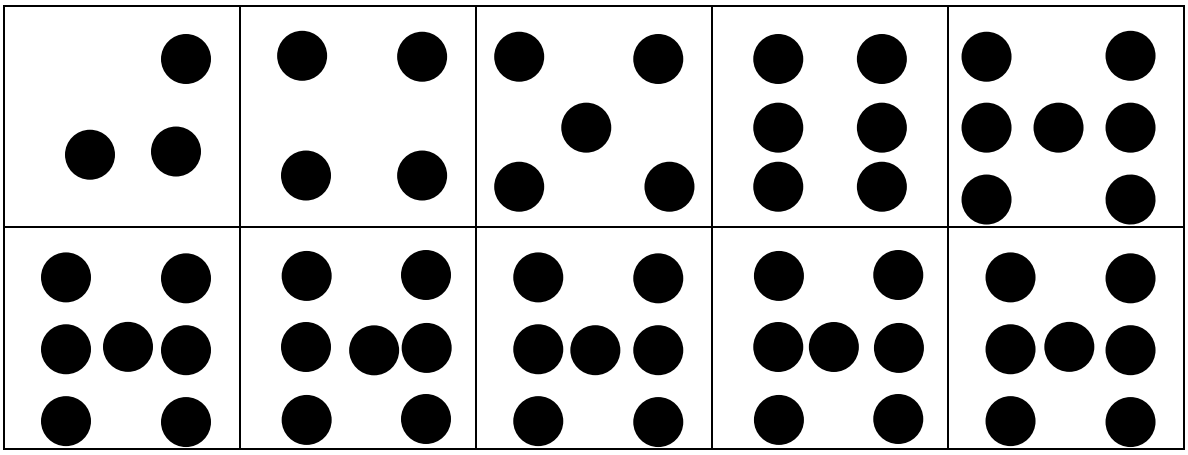
Double 9 Dominoes

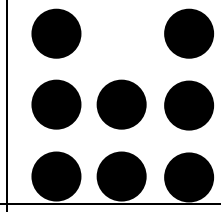
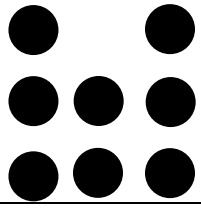
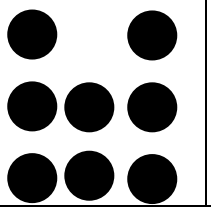
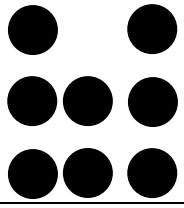
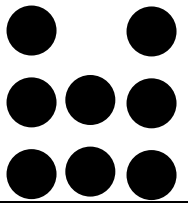


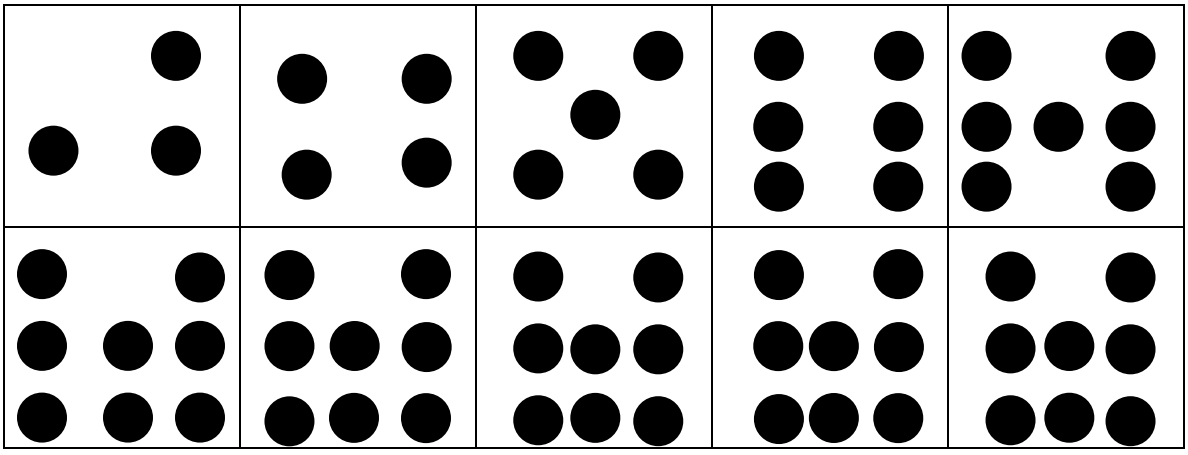


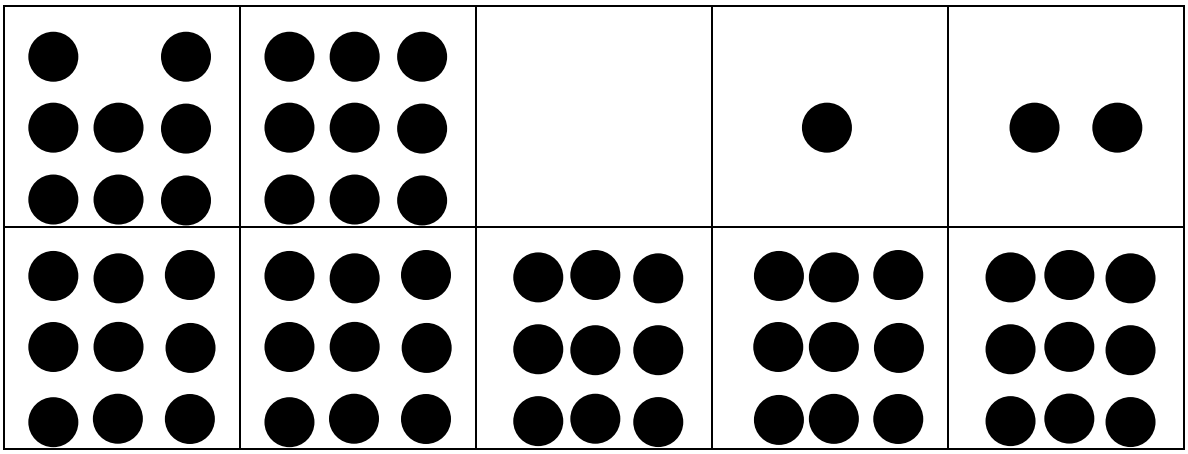


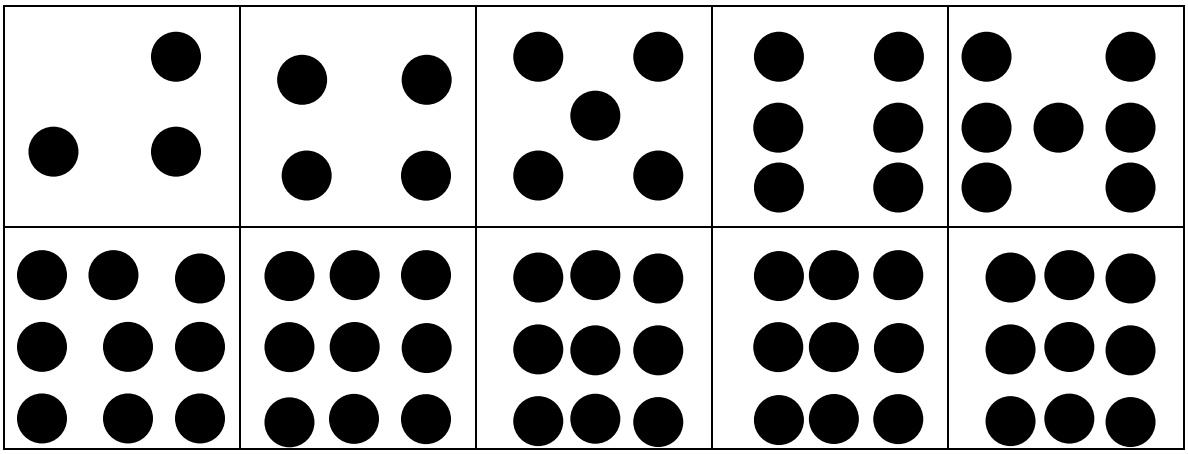




Do not use				
Do not use				







Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Rolling to 0
Focus:	Math vocabulary, basic operations

Materials:	
White boards	Vocabulary Notebooks
Crayolas	six, 6-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

In 3rd grade it is important that you have your addition facts memorized. How will having your addition facts memorized help you with the following subtraction problem? Explain your answer.

17 – 9 =

Fact Practice

Number Hunt

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

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

Stop the class and focus on a student's key learning or understanding. Ask 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.

Consult 4 Kids Lesson Plans

Math Vocabulary

Word for Today: equation

Description: An equation is a number sentence that has numerals and operations that are equal on both side of the = sign. Ex.: 4 + 2 = 6 is a simple equation.

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

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
equation	A number sentence that show how two things are equal in value
Personal Connection	**Drawing**
Write the equation carefully to show the accurate comparison.	

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
Rolling to 0

Demonstrate: Roll 6 dice. Write an equation using ALL of the dice (using them only one time each). Example: Roll is 5, 6, 3, 5, 1, 1 I could add them all together 5 + 6 + 3 + 5 + 1 + 1 = 21 or I could add the first five numbers and subtract the 1 for 20. The object of the game is to eliminate all of the numbers from 1 – 36.

1. Each player or group of players is given six 6-sided dice; (you can add 12 sided dice to stretch player's skills)
2. Player rolls all the dice.
3. Player works with the numbers rolled to get as many answers as possible. A second roll of the dice will cause a penalty of 3 points.
4. Equations should be recorded on paper or white board next to the answer (the number between 1 and 36.
5. Team with the most numbers removed from the grid *(1 point per number, minus any penalty) 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?

Reflection (Confirm, Tweak, Aha!)

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

Consult 4 Kids Lesson Plans

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

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Grids and War
Focus:	Area, Math vocabulary, and addition

Materials:

White boards	Decks of cards	2 dice for each pair of students
Crayolas	Vocabulary Notebooks	
Socks	Graph paper (1/4 " squares)	

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

Johnny has 31 baseball cards. His friend Jorge has 13 fewer cards than Johnny. How many cards does Johnny have? How do you know?

What numbers are important in this problem?
What words are important in this problem?
How do you know?

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

*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.

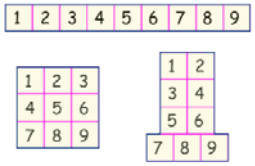
- Play can continue until one player has all cards or time has called

Math Vocabulary

Word for Today: area

Description: In a figure defined by boundaries, the space inside those boundaries is considered the area. Can be measured in square feet, square inches, square miles or other means

Vocabulary Notebook Sample:

New Word	My Description
area	Measure of the space inside of boundaries
Personal Connection	**Drawing**
The area of the front room is 30 square feet.	

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

Demonstrate "Grid Areas" for the students using 1" squared chart paper. Follow the direction for the activity below. Go through the steps carefully, asking for volunteers to come up demonstrate the activity. Ask if there are questions. Have students begin the activity.

Grid Areas

1. Divide students into pairs
2. Give each pair 1 sheet of ¼" grid paper and 2 dice
3. The object of the game is to fill in as many squares on the paper as possible
4. Player 1 rolls the dice (ex. 2 and 6)
5. Student is to draw lines around the grid square that indicate 2 rows or columns by 6 rows or columns as well.
6. Inside the lines, student would write 12 square ¼ inches
7. After Player 1 is finished, Player 2 takes his/her turn
8. Player 2 may create his/her shape by sharing an edge with the figure drawn by Player 1, or may create a completely independent figure somewhere else on the paper
9. At the end of the game, students count the number of ¼ "squares that are not marked off.

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

Closing
Review Say: • Please recap what we did today. • Did we achieve our objectives?
Debrief Three Whats Ask the following three what questions: What was your key learning for the day? What opportunities might you have to do this same thing in the "real world"? What advice would you give to a "new" player getting ready to play this game so he/she could get all the blocks are completed.

Reflection (Confirm, Tweak, Aha!)

- 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.

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Perimeters of Classroom Items
Focus:	Math vocabulary, addition, perimeter, and measurement

Materials:	
White boards	Vocabulary Notebooks
Crayolas	Paper clips
Socks	¼ " graph paper

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")

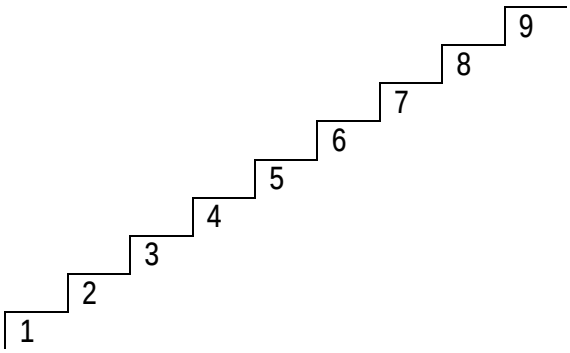
Problem of the Day

Maria and Juana have been saving money in piggy banks. Maria has 5 quarters, 7 dimes, 3 nickels and 9 pennies. Juana has 6 quarters, 3 dimes, 4 nickels, and 5 pennies. Which girl has the most money? How much more? How do you know you are correct?

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



*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

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

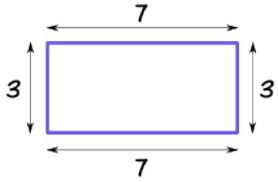
Math Vocabulary

Word for Today: perimeter

Description: A perimeter is the distance around an object other than a circle. To know what a perimeter is, you can put a mark where you start and then work your way around, counting the measuring unit.

Students review the entry made into the Vocabulary Notebook with a partner, making any changes or additions that are necessary

Vocabulary Notebook Sample:

New Word	My Description
perimeter	The distance around a shape or a place
Personal Connection	**Drawing**
The perimeter of the square is 14 feet.	

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

Perimeters of Classroom Items

Remind students of the activity that they did yesterday to measure the perimeter of the shape that they rolled. Encourage students to discuss the process and the key learnings.

Explain that today you are going to do something similar using strings of paper clips to do the measuring and then recording the number of paper clips used on the graph paper.

Demonstrate: Using a string of paper clips, measure a piece of paper. Count the number of clips it takes to go completely around the paper. Remember that there are clips on either end of both sides. County the clips across the top and draw that on the piece of 1" square chart paper—1 square for each paper clip. Draw the first side, bottom, and the second side in the same way. Now count the number of squares and compare to the number of paper clips. It should be the same. Then write the perimeter in a number sentence. Example: 5 + 8 + 5 + 8 = 26 paper clips or 26 squares. Tell students that they will work in pairs and need to measure the perimeter of 3-4 items in the classroom with paper clips and then draw the item on the grid paper, writing the number sentence underneath the drawing..

1. Divide students into pairs
2. Give each pair 1 sheet of ¼" 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

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!)

- 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.

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Roll A Rectangle Perimeter
Focus:	Math vocabulary and perimeter

Materials:

White boards
Crayolas
Socks
Vocabulary Notebooks
Dice
¼ " graph paper

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

You are going on a field trip with your class. The rules are that every student must have a partner. Three classes are going on the trip. Class A has 24 students. Class B has 29. Class C has 28. Will each student have a partner? Explain your answer. How do you know that this is correct?

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 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.

Consult 4 Kids Lesson Plans

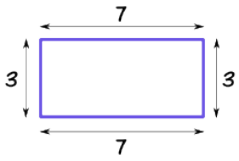
Math Vocabulary

Word for Today: perimeter

Description: A perimeter is the distance around an object other than a circle. To know what a perimeter is, you can put a mark where you start and then work your way around, counting the measuring unit.

Students complete the Vocabulary Notebook

Vocabulary Notebook Sample:

New Word	My Description
The distance around an object	Walking the perimeter or edge of the playground
Personal Connection	**Drawing**
Do you know how to calculate the perimeter of the playground?	

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

Roll a Rectangle

Demonstrate: On a piece of 1" square chart paper, draw the shape as you roll them. Roll 2 dice. If you roll a 5 and a 4, you will want to draw a shape that has 2 sides that are 5 squares long (they should be across from each other) and 4 squares wide. Place an "X" on one corner and then count the number of squares all the way around. (See if students can determine that they could know this number by adding 5 + 4 + 5 + 4 = 18)

1 18	2	3	4	5 6
17				7
16				8
15 14	13	12	11	9 10

Ask students if they notice that the corner squares have to be counted on BOTH outside edges.

Inside the object, students should write the distance around in ¼ " squares.

1. Divide students into pairs

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

2. Give each pair 1 sheet of ¼" grid paper and 2 dice 3. Player 1 rolls the dice (ex. 2 and 6) 4. Student is to draw lines around the grid square that indicate 2 rows or columns by 6 rows or columns as well. 5. Beginning at one corner, students count the number of squares it is around the object. 6. After Player 1 is finished, Player 2 takes his/her turn 7. Player 2 may create his/her shape by sharing an edge with the figure drawn by Player #1, or may create a completely independent figure somewhere else on the paper,	

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!)

- 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.

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	3rd Grade
Lesson Title:	Area and Foreheader
Focus:	Place value, addition, area

Materials:		
White boards	Decks of cards	30-40 paper clips for each pair
Crayolas	Vocabulary Notebooks	
Socks	Graph paper (1/4 " squares)	

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

I am a three-digit number. The digit in my hundreds place is 3 less than the digit in my tens place. The digit in my tens place is 4 more than the number in the ones place. The number in the ones place is 9. What is my number? How do you know?

259

Fact Practice

Foreheader

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.

*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.

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

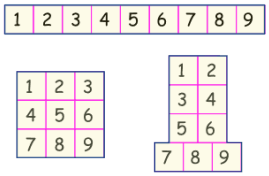
Math Vocabulary

Word for Today: Review of the word area

Description: In a figure defined by boundaries, the space inside those boundaries is considered the area. Can be measured in square feet, square inches, square miles or other means

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

Vocabulary Notebook Sample:

New Word	My Description
area	A way to measure the space inside of something
Personal Connection	**Drawing**
Can you find the area of the playground?	

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

Review "Grid Areas" from yesterday. Discuss how the dimensions of the grid area were determined by rolling the dice.

Explain that today, "Grid Areas" will be determined the student actually measuring items in paper clips and then recording the measurement "to scale" on the grid paper, 1 clip = ¼ " box.

Demonstrate: With a string of paper clips hooked together, measure a piece of paper (count the number of clips long and the number of clips wide). Draw the form on the paper using the scale of 1 clip to 1 square. In the center of the drawing, write the number of squares total as you did yesterday).

Grid Areas #2

1. Divide students into pairs
2. Give each pair 1 sheet of ¼" grid paper and 25-30 paper clips (small work better)
3. Students find 3 things to measure and record the measurements (note: the size of the object is limited by the number of paper clips you give each pair of students)
4. Have pairs share their measurements with other students.

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!)

- 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.

Consult 4 Kids Lesson Plans

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

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?

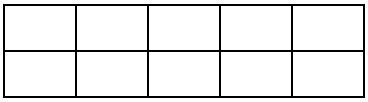
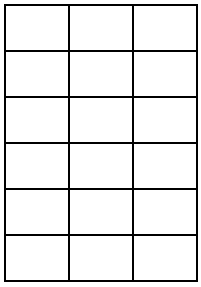
Reflection (Confirm, Tweak, Aha!)

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

Consult 4 Kids Lesson Plans

Tic Tac Toe

Math—3rd Grade

Order the numbers below from the largest to the smallest (place the largest number on top and the smallest number on bottom. 4,789 4,897 4,987 4,876	Complete this problem: 257 +394	What is the area of area of the figure below? Write your answer on the line.  _____
Complete this problem 361 -187	A ticket to the theater cost $5.50 in the afternoon. A soda will cost $2.95. A popcorn and soda combo is $4.35. If you have $10,00, can you get a ticket, popcorn, and a soda?	Write the following number in expanded notation: 5,749
Write this number that is written in expanded notation in the standard form. 9,000 + 400 + 30 + 7	What is the perimeter of the figure below? Write your answer on the line.  _____	Write a number sentence for this story problem. Susie has 14 T-Shirts. Johanna has 11 T-Shirts. Their new friend Ruby has 19 T-Shirts. How many T-Shirts do the girls have together?