Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	4th & 5th Grades
Lesson Title:	How Many Do We Have?
Focus:	Review

Materials:
Post Its
Dice
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

How Many Do You Have?

1. Divide students in groups of 3 – 4.
2. On the Post-It, each group writes a number between 5 and 70 .
3. Post the numbers in numeric order on the white board or a chart.
4. Roll 5 dice one time and one time only.
5. Teams are to use any math that they know (+, -, X, ÷, use of parenthesis, exponents) to make each of the numbers on the Post Its.
6. Give Teams 20-25 minutes to complete the task.
7. Team that has the most correct equations, wins the prize.

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

Component;	Math
Grade Level:	4th & 5th Grades
Lesson Title:	4 in a Row
Focus:	Math vocabulary, place value, multiples

Materials:

White boards
Crayolas
Socks
Vocabulary Notebooks
Hundreds Chart (1 for each pair of students, at 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")

Problem of the Day

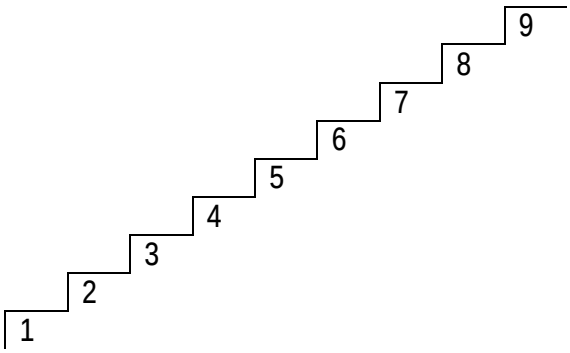
Use the numbers below to build a single 7-digit number. Write it in two ways: number form and word form. Explain how you got your answer.

7 3,000 70 70,000 100 6,000,000 400,000 (Answer: 6,473,177)

Fact Practice

Multiplication 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 multiply that number times each

*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.

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

Math Vocabulary

Word for Today: Review the word multiple

Description: A number that is a multiple of another number would be the product of that base number times another number. Example: 3, 6, 9, 12, 15, 18, 21, 24, 27, and 30 are all multiples of 3

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

Vocabulary Notebook Sample:

New Word	My Description
multiple	Numbers that are in a pattern that you get when you multiply: 3, 6, 9, 12, 15
Personal Connection	**Drawing**
I can list the multiples of 4 to 40.	4, 8, 12, 16, 20, 24 28, 32, 36, 40

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

4 in a Row

Remind students about multiples and that multiples are a base number that is multiplied by various numbers. Example: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30

Demonstrate: Explain that students are going to play 4 in a Row, a game using a 100s Chart. Students may select to use 1 or 2 dice. If they use 2 dice, then they will total the pips and use that as a single multiplier. The object of the game is to get 4 colored spaces in a row before the opponent. For each turn, the person may color in 2 multiples. For example:

6	7	8	9
16	17	18	19
26	27	28	29
36	37	38	40

To block the 36, I would need to have the opportunity of multiples of 2, 3, 4, 6, 9, or 12. If I rolled a 4, I would say "Multiples of 4" and then say "4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44" I could color in both 36 and either 16 or 40. I would pick the 16 because there are no multiples of 37 and I could block the four in a row diagonal.

1. Pair students and give the pair a 100s Chart and two markers
2. Play is over when one player accomplishes 4 in a Row.

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.

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

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	4th & 5th Grades
Lesson Title:	Target and Equation Writer
Focus:	Math vocabulary, basic operations, equations

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

A number can be written in a variety of ways. For example, the number 100 can be written 50 + 50, 200 ÷ 2 or 10 x 10. Write three different ways to show the number:

270

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, subtract, multiply or divide
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 example if the target card is 10, then I could say 5 x 2 = 10, and pick up the 5 and the 2.
8. After one player finishes his/her turn, then the cards taken are replaced by cards from

*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.

the remaining deck

9. Player with the most cards at the end of the game win

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 express an operation and an answer
Personal Connection	**Drawing**
It is challenging to write and equation using large numbers.	

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—one for each operation: addition, subtraction, multiplication, and division.

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 732 x 126 = 92,232, or I could make a 126 ÷ 2 = 63.

Player can only make 1 equation with each 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:	4th & 5th Grades
Lesson Title:	Rolling to Zero
Focus:	Math vocabulary, basic operations, order of operations

Materials:

White boards	Vocabulary Notebooks
Crayolas	five, 6-sided dice for each pair
Socks	Product 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

The school had a fundraiser to buy new soccer goals. Each classroom sold candy bars for $1.00 each. At the end of the first week, this is how each of the 5th grades were doing:

Room 4	$1,527
Room 5	$1,257
Room 6	$1,275
Room 7	$1,752

Which room sold the most candy? The least? How do you know you are correct?

Fact Practice

Product Hunt

1. Divide students into pairs
2. Each pair needs a Product Hunt sheet (attached to this lesson plans)
3. Player rolls two, 12-sided dice.
4. Player multiplies the two numbers.
5. If the product is not yet covered, then player may cover the product.
6. Next player repeats steps 1-3.

*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.

7. Winner is determined by who has the most numbers covered.

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.

Vocabulary Notebook Sample:

New Word	My Description
equation	Showing how two things are equal by writing a number sentence
Personal Connection	**Drawing**
The equation is 5 + 8 = 13.	

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 5 dice. Write an equation using ALL of the dice (using them only one time each), and = 0. Write the problem down. Remember the order of operations as you model (PEMDAS—Please excuse my dear aunt Sallie). It is essential that you write the problem correctly.

1. Each player or group of players is given 5 6-sided dice; (you can add 12 sided dice to stretch player's skills)
2. Player rolls all the dice.
3. Player works the equation, using addition, subtraction, multiplication, and division, to get to an answer of "0".
4. After working the equation one way, player tries to find as many different ways as possible to get to "0" with the same numbers.
5. Equations should be recorded on paper or white board.

Example:

Player rolls a 6, a 5, a 3, a 2, a 2.

- (6 – 5) - (2 * 2) * 3 = 0

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?

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- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
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- Ask them to comment on something (if anything) they have learned today that was brand new to them.

Product Hunt

48	20	81	3	45	27
1	24	108	77	7	40
120	72	96	8	18	60
14	144	70	22	15	11
33	35	66	132	63	16
12	30	28	110	100	49
6	36	21	121	90	2
84	5	44	25	99	10
32	9	56	88	4	11
24	50	55	54	42	80

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	4th & 5th Grades
Lesson Title:	Grid Areas
Focus:	Math

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

Rico has 243 papayas and bananas total. If Rico has 72 bananas, how many more papayas does Rico have? Explain how you got your answer.

What are the key numbers? The key words?

Fact Practice

Multiplication 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 multiply the 2 numbers that have been turned up
- First person to give the answer either wins the cards because the answer is correct, or has to turn over 2 cards because he/she gave the wrong answer
- At the end of round, students may reshuffle the pile of cards that they have
- Play can continue until one player has all cards or time has called

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

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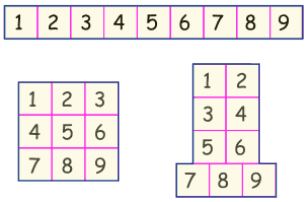
Vocabulary Notebook Sample:

New Word	My Description
area	A way to measure the space inside of boundaries
Personal Connection	**Drawing**
The area of the flower bed is 28 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. Play 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

Consult 4 Kids Lesson Plans

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:	4th & 5th Grades
Lesson Title:	Grid Areas 2
Focus:	Multiplication, area, and math vocabulary

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

Mark has a total of 504 chairs. He must put them in rows of 9. He has decided that he will need to make 56 rows. Is his answer correct? How do you know?

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 multiplies 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

*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.

opportunity to be both a player and referee

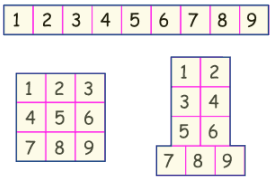
Math Vocabulary

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	The term that refers to the space inside an object
Personal Connection	**Drawing**
I can find the area of these different shapes.	

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:	4th & 5th Grades
Lesson Title:	What's The Average?
Focus:	Math vocabulary, basic operations, statistics

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

John and Cathy are looking at this number: "8, 592". Cathy says that the 5 stands for 500. John disagrees and says the 5 is for 50. Which one is correct and how do you know?

Which numbers and words are important?

Why?

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 multiplies the cards.
7. Student writes his/her problem on the white board, writing a complete number sentence.
8. Students take turns drawing and creating problems.

*Activity → Teachable Moment(s) *throughout*

During the lesson check in with students repeatedly.

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

Take advantage of any teachable moments.

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

Description: An average is found by adding numbers together and ten dividing the total by the number of numerals that were added together. (Ex. 5 + 6 + 7 + 8 = 26 ÷ 4 = 6 ½) Average is a way of comparing things to a standard. In math we often use the word "mean" instead of the word average.

Have students complete his/her Vocabulary Notebook.

Vocabulary Notebook Sample:

New Word	My Description
average	Average refers to the number that could be evenly spread across a group
Personal Connection	**Drawing**
The temperature here is an average of 81º if you think year round.	

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

What's the Average?

Demonstrate: Get a deck of cards (without jokers, face cards, or 10s) and draw our 7 cards. Ask students the process for finding the average (add and then divide). Ask for students to help total the value of the cards. Ask students what the number is to be used as the divisor—"7" in this case. Ex. Cards include 5, 4, 6, 3, 8, 8, 2 + 36 ÷ 7 = 5 1/7

Then answer each of these questions:
What is the smallest number? The largest?
What is the average? What is another word for average? (mean)

1. Check in to be sure that students understand the activity.
2. Divide students into pairs
3. Students should find 5 averages
4. Have students record the averages from smallest to largest
5. Students should share the averages they have found with the rest of the class
6. Students should answer the 4 questions above

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:	4th & 5th Grades
Lesson Title:	Who's Average?
Focus:	Math vocabulary, average, basic operations

Materials:

White boards	Vocabulary Notebooks
Crayolas	Paper clips (a box for each group at a minimum
Socks	Double 9 Dominoes

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, find the average. How close is the middle number that you created to the average of the three numbers?

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 multiplication problem on their white board, multiplying the numbers represented by the spots Example: Domino drawn is

●●	●●●

Multiplication: 2 x 3 = 6

*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: average

Description: An average is found by adding numbers together and ten dividing the total by the number of numerals that were added together. (Ex. 5 + 6 + 7 + 8 = 26 ÷ 4 = 6 ½) Average is a way of comparing things to a standard. In math we often use the word "mean" instead of the word average.

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

Vocabulary Notebook Sample:

New Word	My Description
average	The average is found by adding and then dividing, it tells you a general answer
Personal Connection	**Drawing**
The average number of cookies for each person is 3 cookies.	3 + 4 + 8 = 15 15 ÷ 3 = 5

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

Complete the Vocabulary notebook for each word.

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

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

Activity

Who's Average?

Demonstrate: Create several strings of paper clips hooked together. Ask one student to come up to the front of the room. Measure the students in paper clips. Label this string of paper clips with the student's name. Repeat the process with another student. Use a second string of paper clips. Ask students for the process of finding the average. Adding together and then dividing by the number (in this case number of paper clip strings). Determine the "average" height. Then ask students to determine who in the class would be taller than average and less than average.

Let students know that Who's Average is going to be done as a group effort. Ask students to determine who is the shortest person and who is the tallest person in the classroom. Have the students measure each of these students in paper clip strings. Then have students hook the two pieces together and find the average. Once found, this becomes the "standard"

1. Divide students into groups of 4
2. Each group of 4 should order the students in the classroom as "above average" or "below average"
3. Each group should then line up each side of the continuum to determine if they are correct. Remember, you are not trying to determine who is above or below average, but by determining how correct the prediction of the teams is.

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.

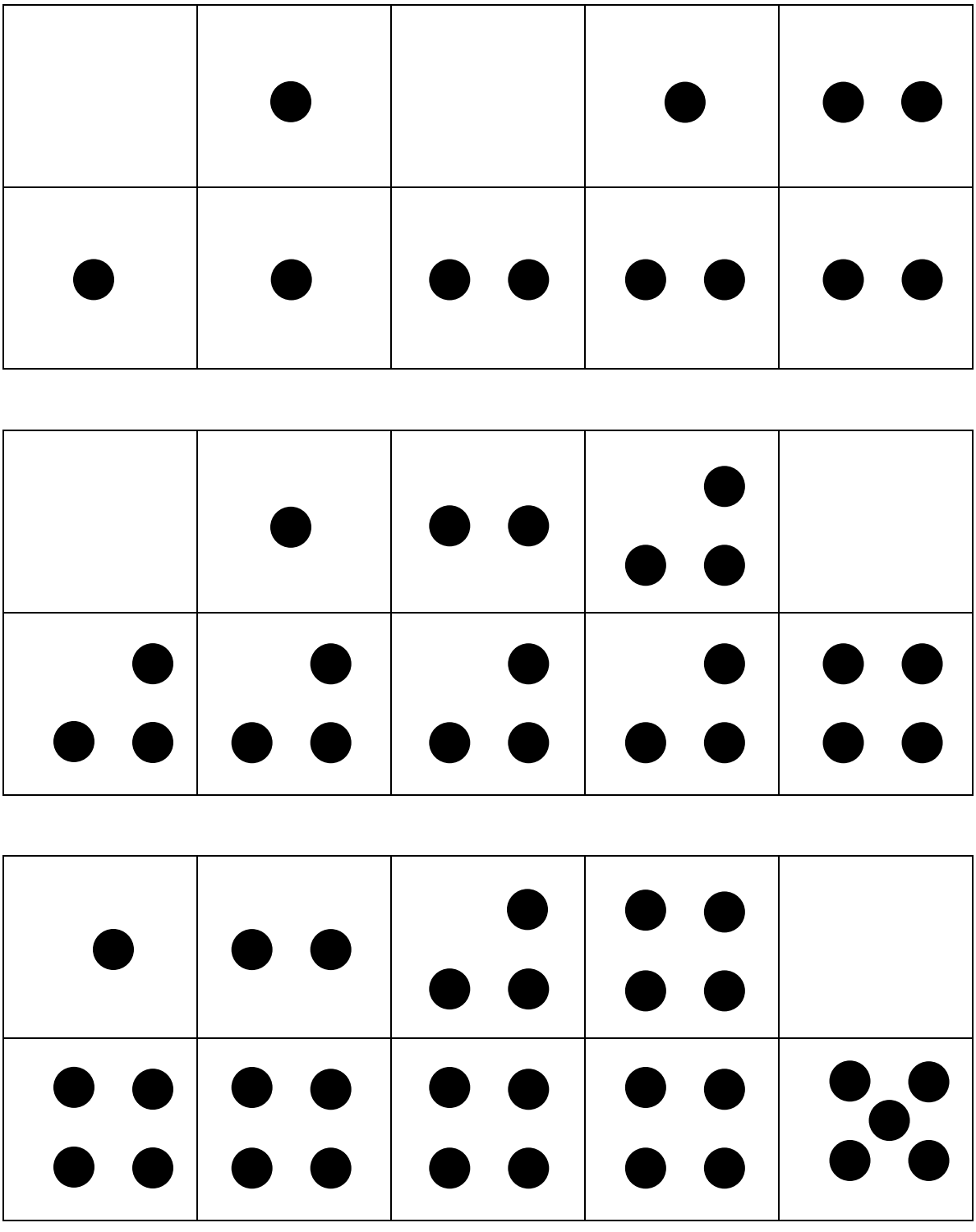
Closing
Review Say: • Please recap what we did today. • Did we achieve our objectives?
Debrief Three Whats Ask the following three what questions: What was your key learning for the day? What opportunities might you have to do this same thing in the "real world"? What advice would you give to a "new"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

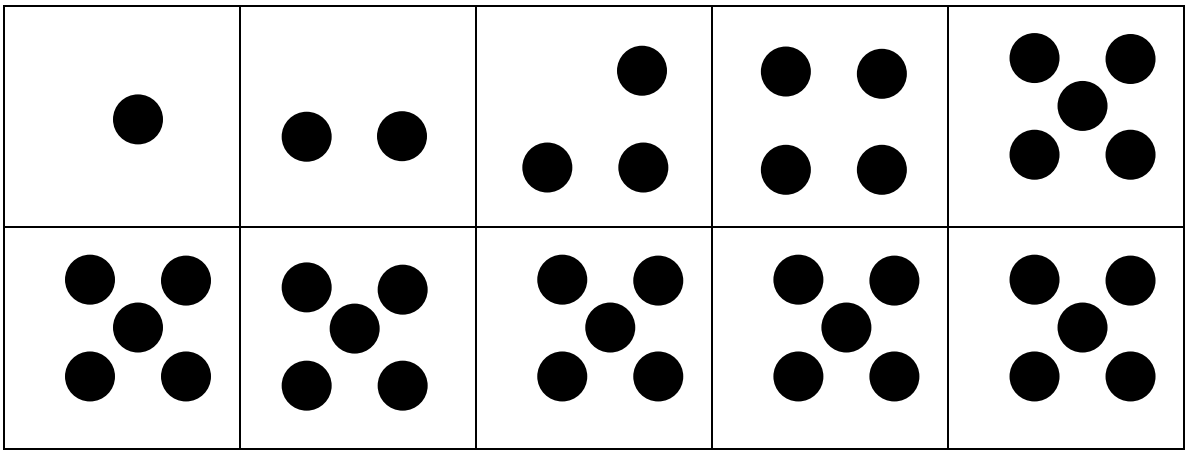
Reflection (Confirm, Tweak, Aha!)

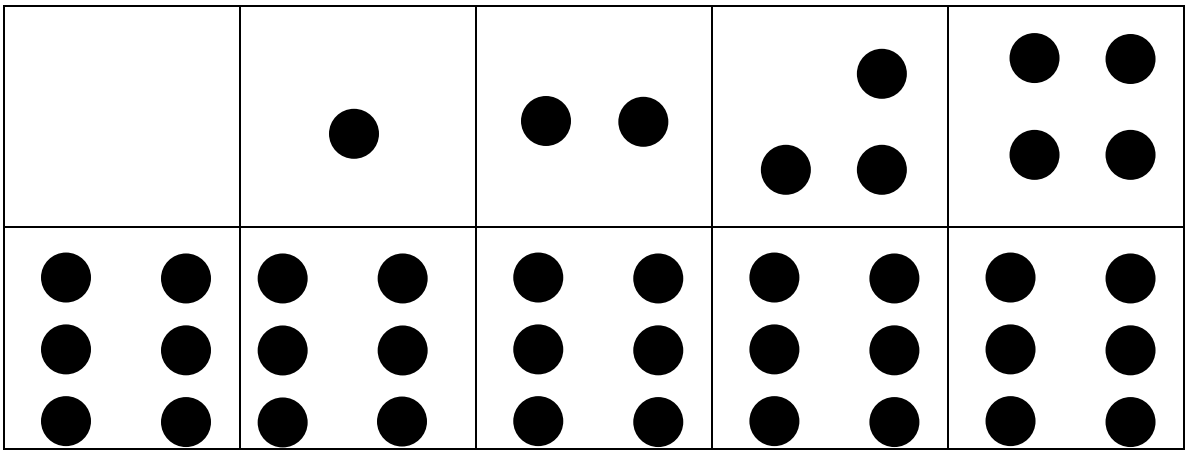
- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them.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

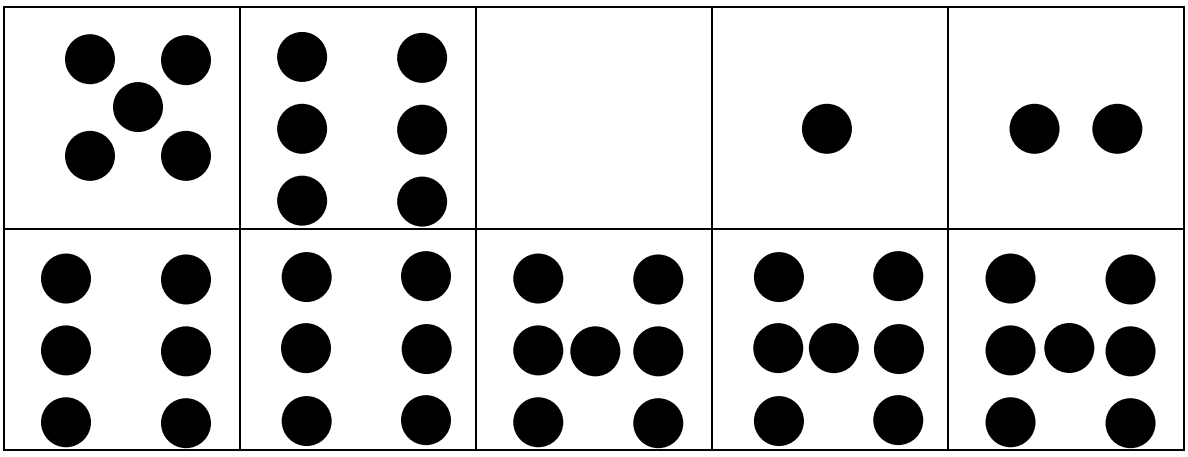
Consult 4 Kids Lesson Plans

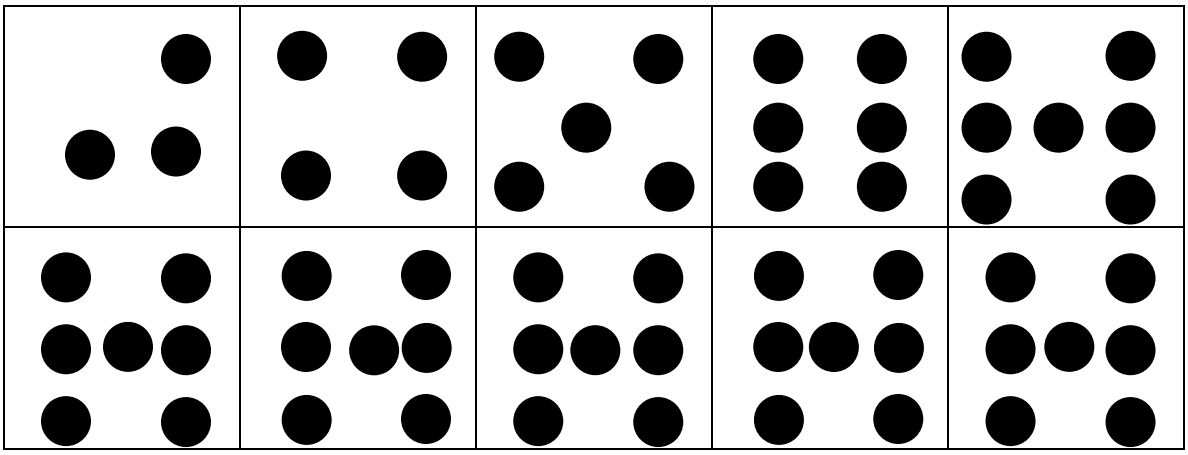
Double 9 Dominoes

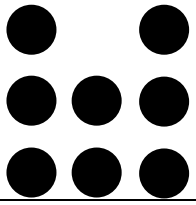
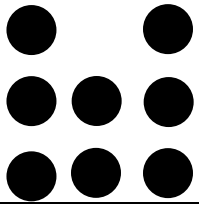
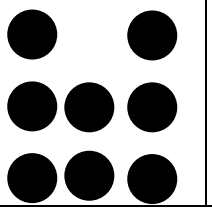
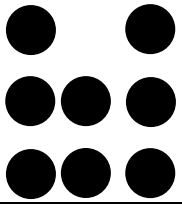
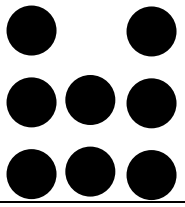


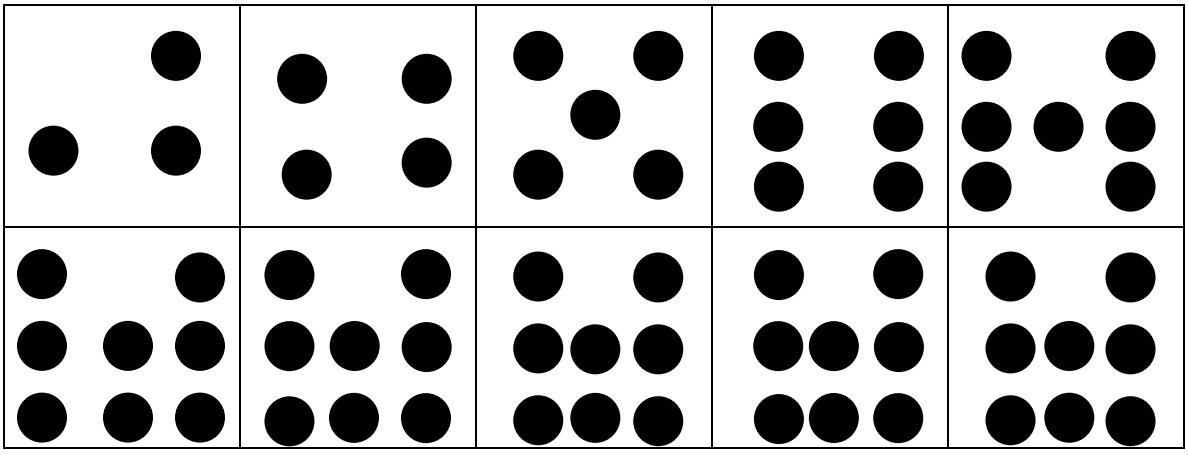


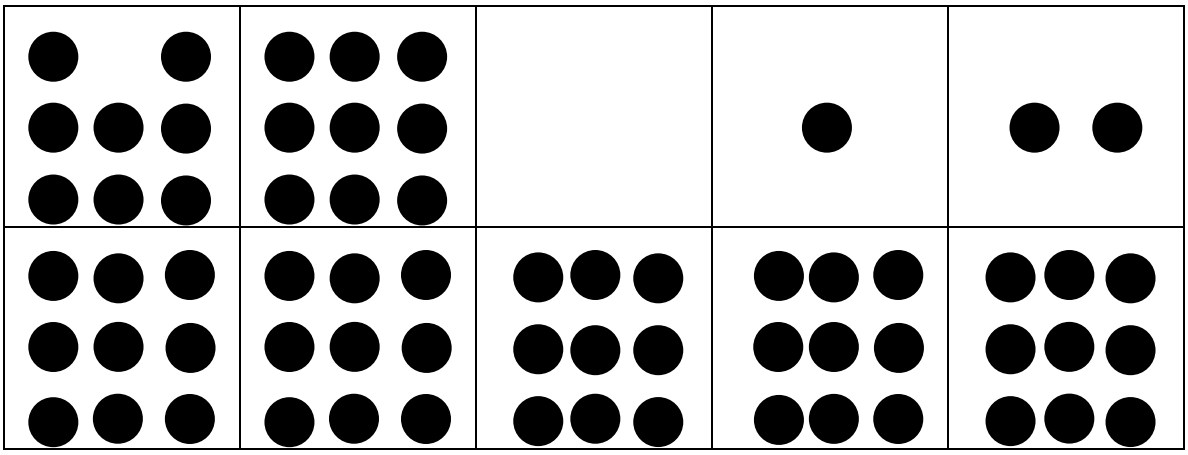


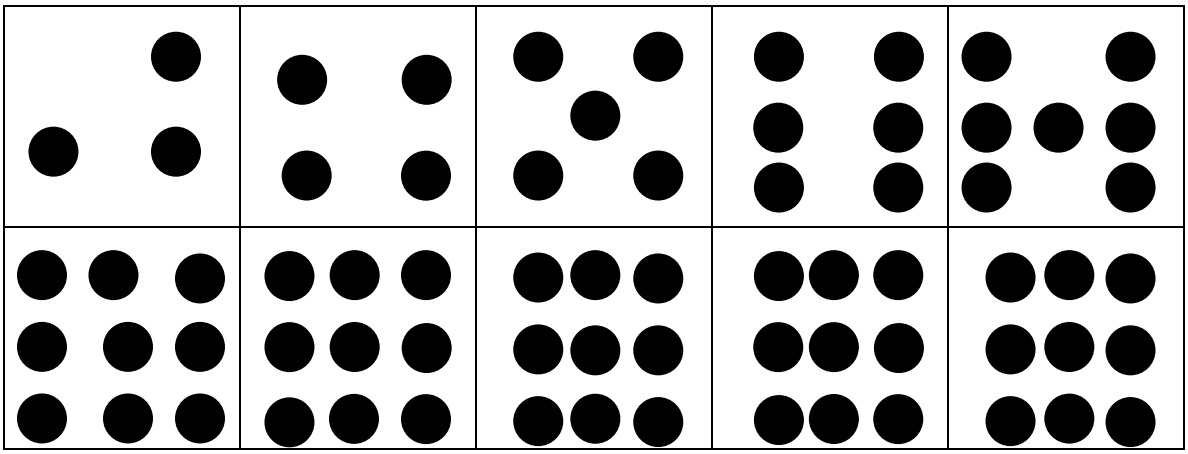




Do not use				
Do not use				







Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	4th & 5th Grades
Lesson Title:	Exactly 100
Focus:	Math vocabulary, basic operations, pattern

Materials:

White boards
Crayolas
Socks
Vocabulary Notebooks
6-sided dice; 12-sided dice

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. Complete the pattern by adding the next 5 shapes, replacing the question marks.

Fact Practice

Fact Family

A Fact Family is 3 numbers which have a relationship in multiplication and division. For example, the number 9, 4, and 36 have a particular relationship in math. This family has four members:

9 X 4 = 36
4 X 9 = 36
36 ÷ 4 = 9
36 ÷ 9 = 4

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: median

*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.

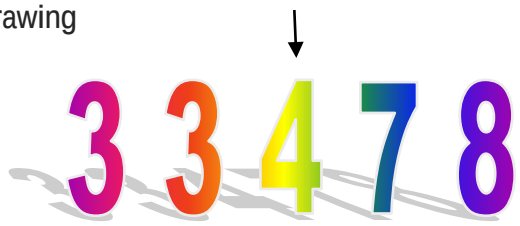
It is important to review academic math vocabulary often throughout the day.

Consult 4 Kids Lesson Plans

Description: While an average is found by adding a set of numbers and then dividing by the number of items in the set. The mean is different. It is important when you are looking for the mean to order the numbers from the smallest to the largest. The median is the number in the middle. For example, in this set of numbers: 3, 5, 5, 6, 7, 7, 7, the mean is the number "6" because it is in the middle. If we were trying to find the average, we would discover that the average is 5 5/7, slightly less than the median.

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

Vocabulary Notebook Sample:

New Word	My Description
median	In a range of numbers the median is the number in the middle, not in value but in order
Personal Connection	**Drawing**
Put the numbers in order from smallest to largest and then circle the median.	

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:	4th & 5th Grades
Lesson Title:	Times Up
Focus:	Measuring Time

Materials:	
White boards	Vocabulary Notebooks
Crayolas	Copies of activities at end of Lesson Plan
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 Martin wrote the number 5,732,807 in words. Do you agree or disagree with Martin's response? He wrote: five million, seven hundred thirty-two thousand, eight hundred seventy. Explain why you answered as you did.	*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 Multiples Multiplication facts are learned by recognizing the multiples of any given number. In this practice you will be determining the multiples of randomly generated numbers. You will need a chart and crayolas (150 chart). 1. Roll one or two dice (if you roll two add the numbers together to determine the factor in the fact practice) 2. Mark all multiples of the number and then pass off to the next person. 3. Player may mark the same number.	
Math Vocabulary Word for Today: median	It is important to review academic math vocabulary often throughout the day.

Consult 4 Kids Lesson Plans

Description: While an average is found by adding a set of numbers and then dividing by the number of items in the set. The mean is different. It is important when you are looking for the mean to order the numbers from the smallest to the largest. The median is the number in the middle. For example, in this set of numbers: 3, 5, 5, 6, 7, 7, 7, the mean is the number "6" because it is in the middle. If we were trying to find the average, we would discover that the average is 5 5/7, slightly less than the median.

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
median	In a series of numbers the median is the one that is in the middle—location not value
Personal Connection	**Drawing**
In that string of numbers that has 35 different number, the one that is the median is in the middle.	

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

Times Up

This game requires three players: 2 contestants and 1 judge.
Each contestant has a pencil/pen and a white board. The player should make 10 squares on the white board.
You will need one set of Times Cards for every group of 3 people.
To play the game, Times Up Cards are face down in the center.
Player #1 draws a card and answers the question.
If the answer is correct, then player colors in one square.
If the answer is incorrect, the other player has an opportunity to answer that question correctly and then answer one of their own. They color in each box, 1 box for each correct answer.

Demonstrate: Show students how to play the game. Bring up three students. The "judge" has the answer key.

Answer Key and playing cards are attached to this lesson plan. It is suggested that you print the cards on card stock and laminate for future use.

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

Fact Practice--Multiples

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
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150

Times Up Questions

1. How many days are there in a year?	2. How many weeks are there in a year?	3. Which months have 31 days?
4. How many years in a decade?	5. How many years in a century?	6. How many weeks in a decade?
7. How many weeks in a century?	8. How many hours in a day?	9. How many hours in a week?
10. How many hours in a year?	11. How many years in "4 score and 7 years ago…"	12. How many time zones are there around the world?
13. How many hours are there in 420 minutes?	14. How many seconds are there in 6 hours?	15. What time is it when the airport says the time is 1700?
16. If it is 9:00 in LA, what time is it in New York City?	17. What do the letters "EST" mean?	18. What is the reason there is Leap Year every 4 years?
19. How many days in a decade?	20. How many days in a century?	21. What time is it when the airport says the time is 0600?
22. How many quarters in a year?	23. How many minutes in 3 days?	24. How many days in 4 years?

Times Up! Answer Key

1. 365 days
2. 52 weeks
3. January, March, May, July, August, October, December
4. 10 years
5. 100 years
6. 520 weeks
7. 5,200 weeks
8. 24 hours
9. 168 hours
10. 8,760 hours
11. 87 years
12. 24 time zones
13. 7 hours
14. 360 seconds
15. 5:00 p.m.
16. 12:00
17. Eastern Standard Time
18. Each year there is actually ¼ of a day over 365 days. Each 4 years the total "extra" equals 1 day, so it is added to the calendar.
19. 3,652 + ½ of a day
20. 36,500 days
21. 6:00 a.m.
22. Four quarters
23. 4,320 minutes
24. 1,461 (Remember leap year)

Consult 4 Kids Lesson Plans

Component:	Math
Grade Level:	4th & 5th Grades
Lesson Title:	Tic Tac Toe
Focus:	Math vocabulary, multiples and multiplication

Materials:

White boards
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

Susan has a total of $.85. She has only quarters, dimes and nickels. How many different ways could Susan have the total of $.85?

Show all possible ways. (draw them on a piece of paper)

How do you know you have all of the ways?

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 x 8 = 56
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: multiple

Description: A number that is a multiple of another number would be the product of that base number times another number. Example: 3, 6, 9, 12, 15, 18, 21, 24, 27, and 30 are all multiples of 3

Students complete the Vocabulary Notebook

Vocabulary Notebook Sample:

New Word	My Description
multiple	A series of numbers that are related because of the equal difference between them
Personal Connection	**Drawing**
It is easy to count in multiples of 2, 5 and 10.	

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

Complete the Vocabulary notebook for each word.

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

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

Activity

Tic Tac Toe

Demonstrate: Draw a Tic Tac Toe on the board. Write a different number in each of the spaces. Explain that to "claim" a space student must name a least 3 multiple of the number in the Tic Tac Toe Space

5	3	9
4	1	7
8	2	6

If I would like to place my mark in the 6 space, I must say at least 3 of the following multiples: 6, 12, 18, 24, 30, 36, 42, 48, 54, or 60

Tic Tac Toe

1. Divide students into pairs
2. Give each group a white board and markers (or crayolas) 2 different colors
3. They will play a total of 10 games, each game board should be different, numbers in different places on the board
4. When 10 games have been played, have students report wins, losses, and the number of cat's games
5. Record totals on a chart

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.