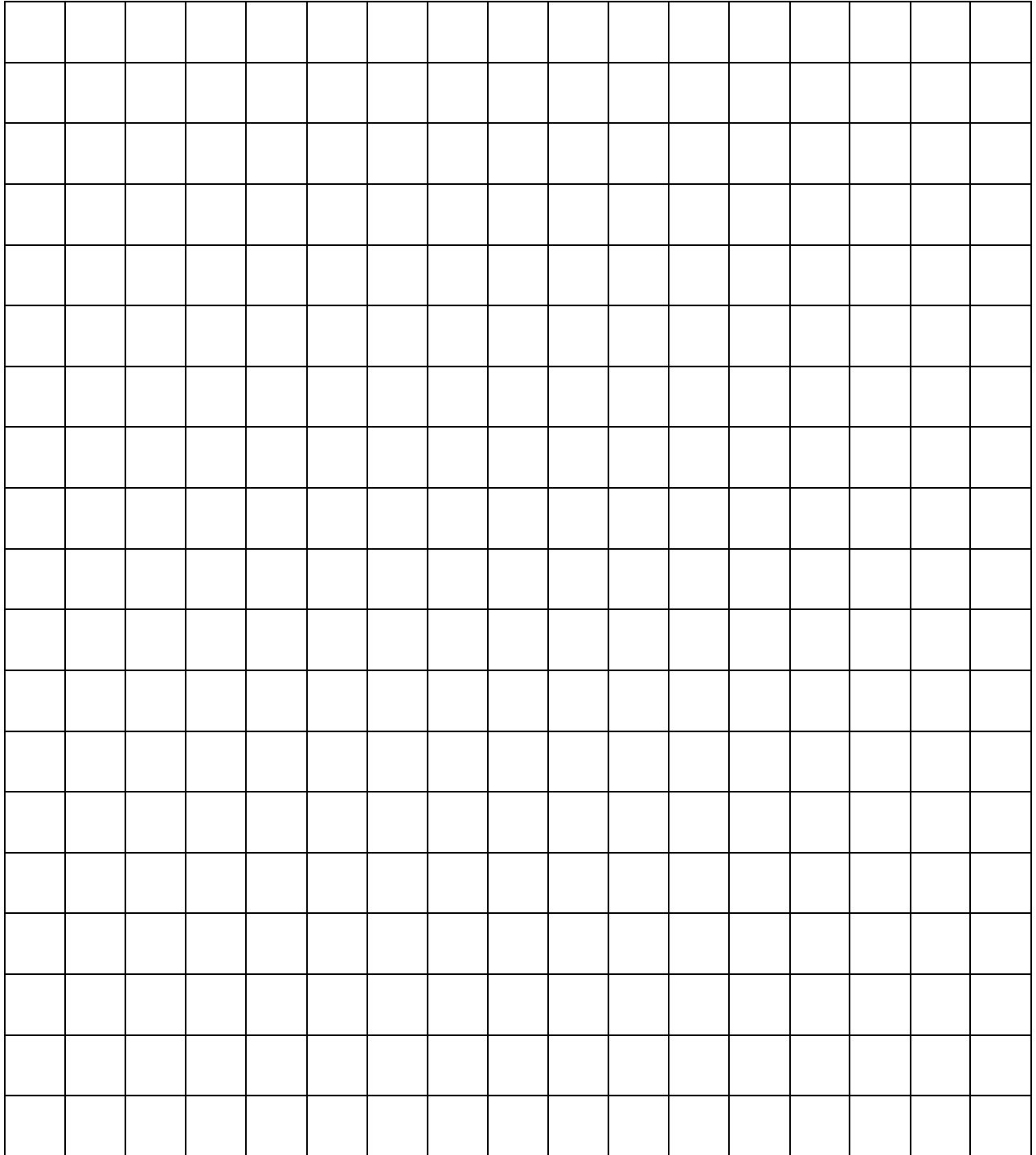


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One Centimeter Grid Paper



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Representations of Place Value

This task will include a quick write to brainstorm the tools that can be used to represent place value

Directions:

- Identify the tools that students in your classroom use during study of place value

My Classroom	New Ideas



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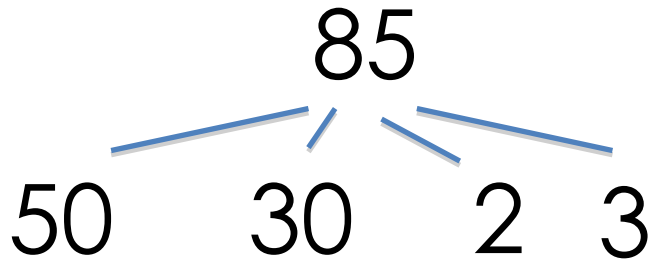
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Decomposing Numbers

Directions:

- Decompose the number 85 as many ways as possible. An example is shown below.



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Number of the Day

Write as many mathematical expressions as you can that equal 48.

Share some expressions. What mathematical ideas/relationships can you see within pairs of expressions?

NAME _____

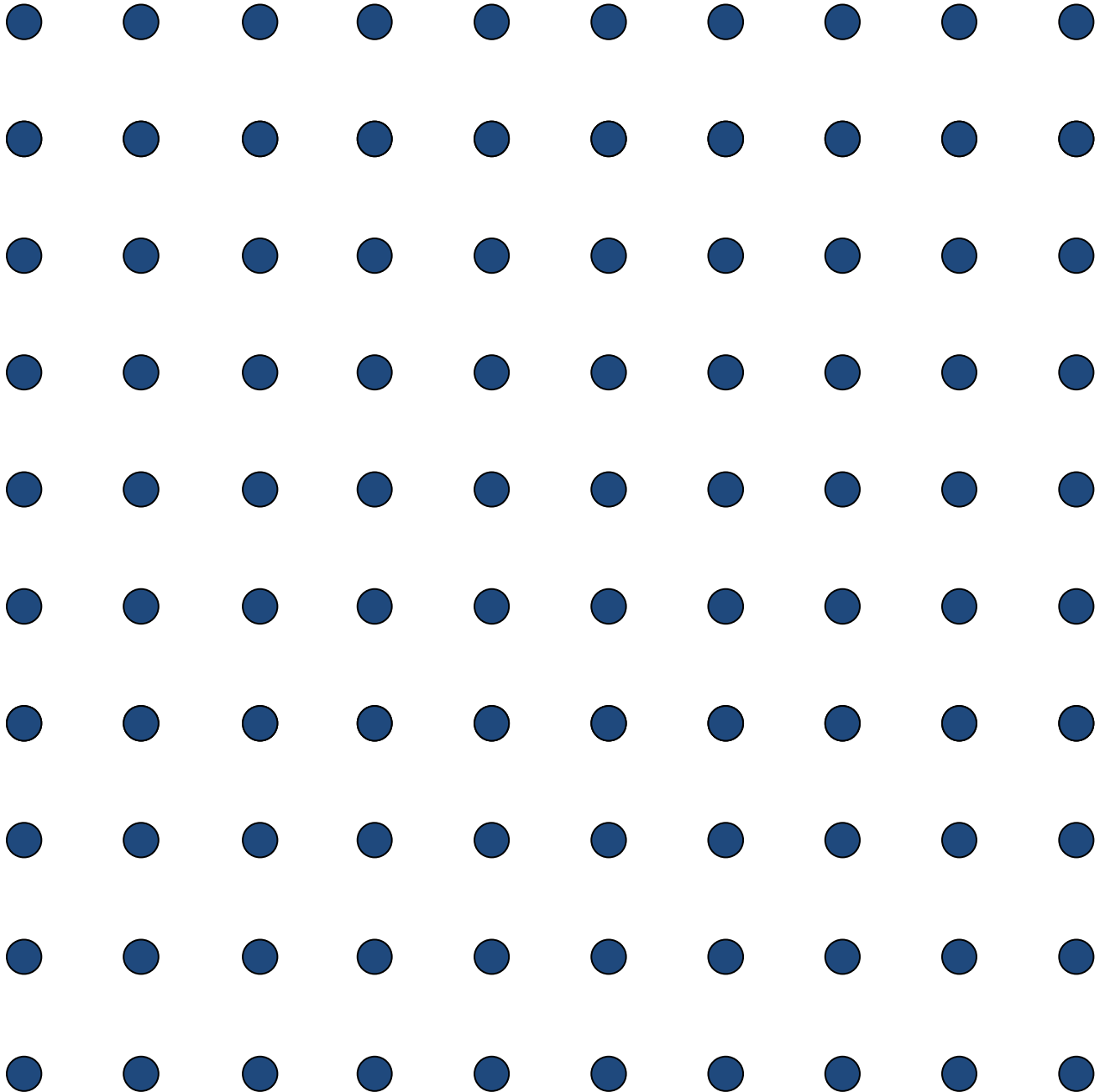
Open Number Lines



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100 Dot Paper

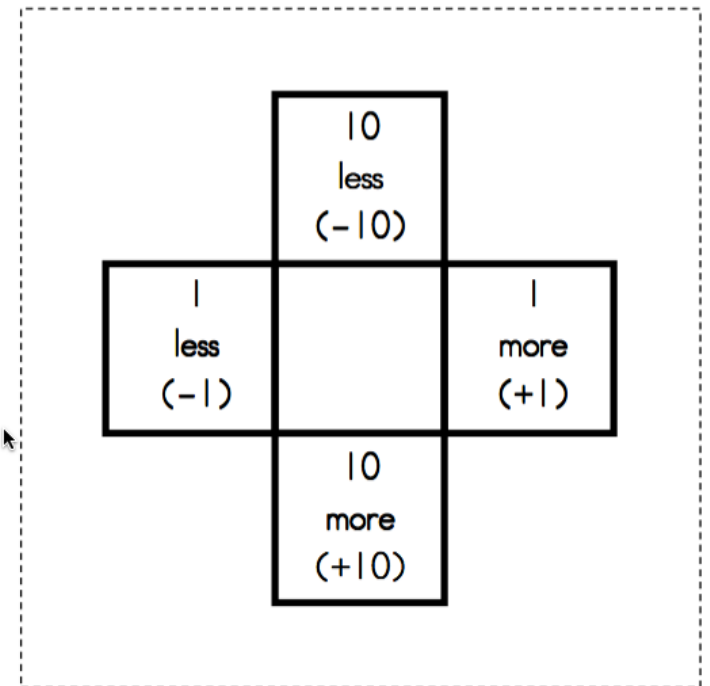
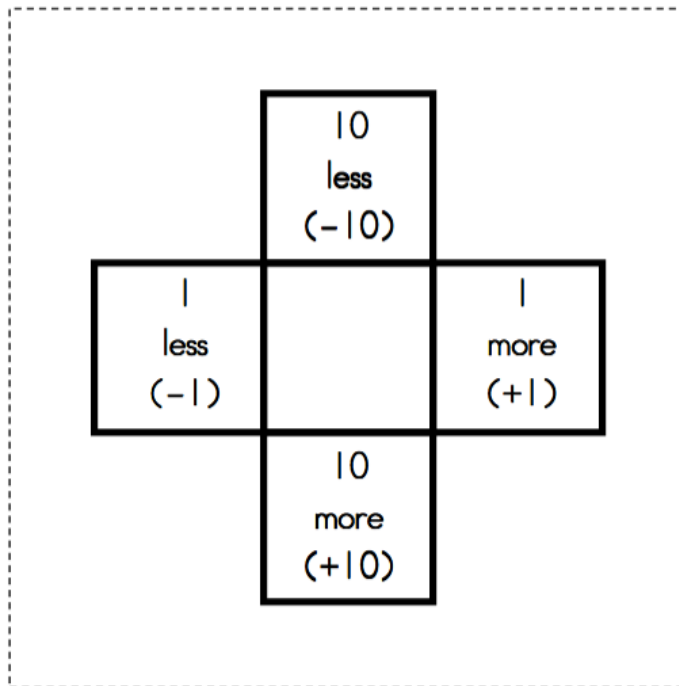


NAME _____

10 More & Less / 1 More & Less

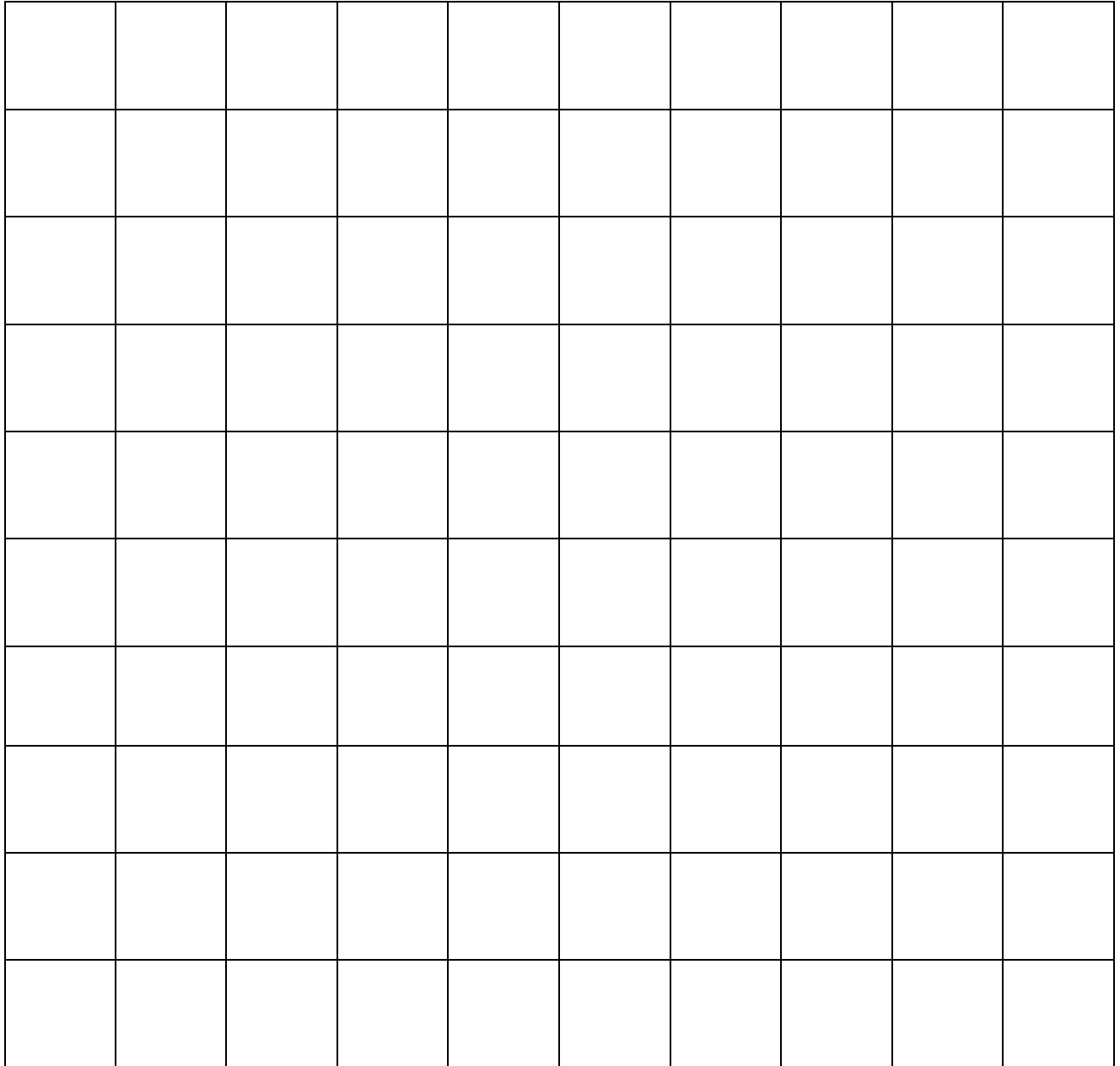
Template for use on a 100 board

Place the open square over a number on the 100 board. Lift flaps above, below and the sides to identify numbers 10 more/less and 1 more/less.



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10 x 10 Grid



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Activity 5: Place Value Table Activity – “Grouping and Grazing”

Materials: ipad or laptop computer

<http://illuminations.nctm.org/Activity.aspx?id=3526>

Grade Level: PK –2nd grade

Procedure:

- Explore the program and try to group the cows so the alien ship can capture them. Try –
 - Counting by 5s
 - Counting by 10s
 - Adding and Subtracting
- Decide how you could customize the activity for your students.

Questions:

- What standard does the activity address?

- What does a child need to know mathematically to do the activity?

- What evidence will you note that shows a child is learning the mathematics in the activity?

Activity 5: Place Value Table Activity – “Clear the Board”

Materials: Deck of 20 ten-frame cards (5 cards showing zero, 10 cards showing five, 5 cards showing ten) 1 workmat with three ten-frames for each player, 30 counters per player

Grade Level: PreK, K, 1st grade

Procedures:

1. This is a game for a small group of students; students take turns.
2. The goal of the game is to completely clear the board of all counters. The first person to do so is the “first winner”, the second person to do so is the “second winner” etc.
3. To begin the game, each player completely covers the board with 30 counters, one in each space on the board. The deck of 20 cards is shuffled and placed face down in the center of the table.
4. On each turn, a player selects a card, clears that number of counters, and tells how many he has left on his board to clear. If a player draws a card and he doesn’t have enough counters left, he loses his turn. The board must be cleared exactly.
5. Play continues until ALL the winners have cleared their boards.

Questions:

- What standard does the activity address?
-
- What does a child need to know mathematically to do the activity?
-
- What evidence will you note that shows a child is learning the mathematics in the activity?

●	●	●	●	●

●	●	●	●	●

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Activity 5: Place Value Table Activity – “100s Chart Cover-up”

Materials: 0 – 9 spinner, large paper clip, small straw; Hundreds chart; 100 inch tiles- 2 different colors if played by 2 people; 3 different colors if played by 3 people; 4 different colors if played by 4 people

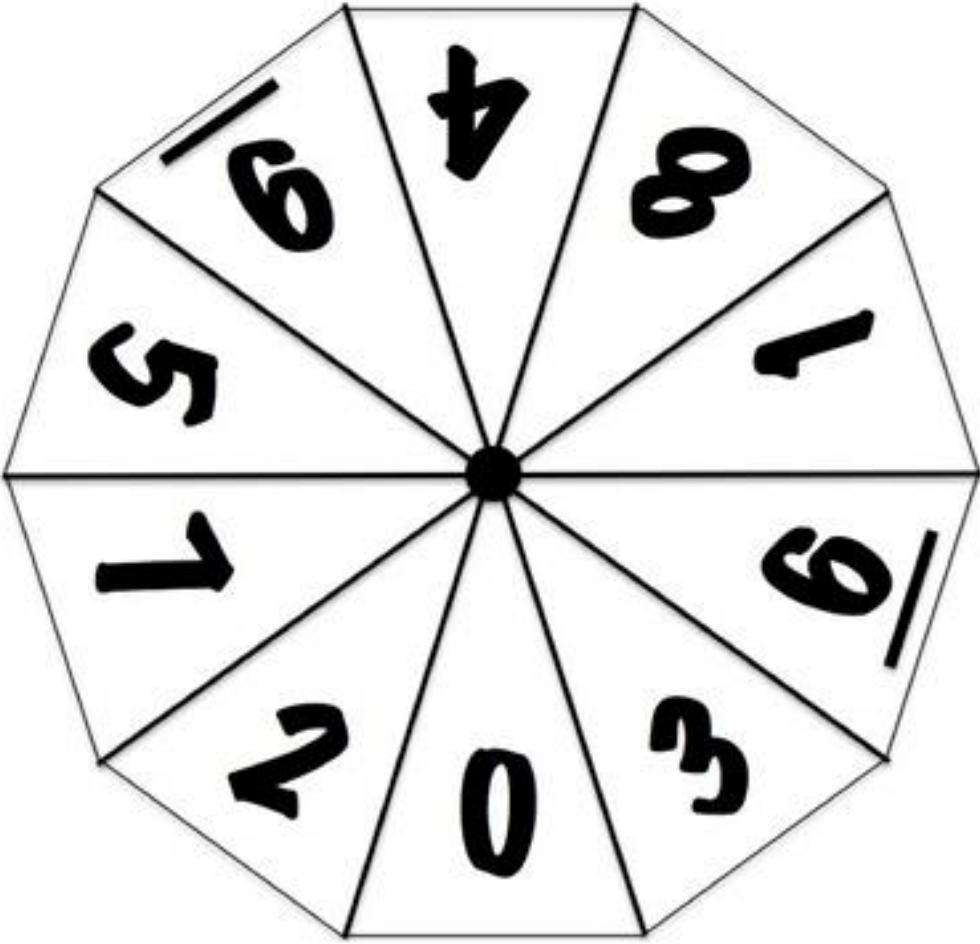
Grade Level: 1st grade– 2nd grade

Procedures:

1. This is a game for 2, 3, or 4 players; players take turns spinning the 0-9 spinner.
2. The goal of the game is to be the player who has covered the most squares with their color of tile.
3. BEFORE each spin, the player states either TENS or ONES. Then the player spins the spinner. If she said TENS, she can cover all the numbers on the hundreds board that have the digit she spun in the TENS place. If all of them are already covered, she loses her turn. If she has said ONES, she can cover all the numbers on the hundreds board that have the digit she spun in the ONES place.
4. Play continues until a total of EXACTLY 12 spins have occurred. The winning player is the one who has the most squares covered.

Questions:

- What standard does the activity address?
- What does a child need to know mathematically to do the activity?
- What evidence will you note that shows a child is learning the mathematics in the activity?



Activity 5: Place Value Table Activity – “Two Dashes and a Throw-Away”

Materials: 2 dice (0-5); a recording sheet “Two Dashes and a Throw-Away” for each partner, 100s chart if needed

Grade Level: 1st grade– 2nd grade

Procedures:

1. This is a game for partners; partners take turns.
2. The goal of the game is to create the largest number the most times in 9 tosses.
3. On each turn, each player tosses the dice together. He then finds the sum of both dice and writes that number in one of three places: the tens place in the number, the ones place in the number, or the throw away place. If two fives are tossed, the sum is 10 and since the player can only write one digit, he can write ANY digit he wants in ANY space. In other words, two fives will be a WILD toss.
4. After each player has tossed the dice three times, the player with the largest number circles yes and the player with the lowest number circles no. If both players have the same number, both players circle yes.
5. Play continues until the recording sheets are completed. The player with the most yes responses, is declared the winner.

Questions:

- What standard does the activity address?
- What does a child need to know mathematically to do the activity?
- What evidence will you note that shows a child is learning the mathematics in the activity?



"Two Dashes and a Throw Away" Recording Sheet

Number	Throw Away	Larger?
_____	_____	yes no
_____	_____	yes no
_____	_____	yes no
_____	_____	yes no
_____	_____	yes no
_____	_____	yes no
_____	_____	yes no
_____	_____	yes no
_____	_____	yes no
_____	_____	yes no



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Activity 5: Place Value Table Activity – “Books to Introduce Place Value”

Materials: Books that illustrate the concept of place value –

- *One Hundred Hungry Ants* by Elinor Pinczes
- *The Father Who Had 10 Children* by Benedicte Gueiter
- *What Comes in 2s, 3s, and 4s?* by Suzanne Aker
- *Benny’s Pennies* by Pat Brisson
- *100th Day Worries* by Margery Cuyler
- *One Grain of Rice* by Demi
- *Ten Go Tangle* by Arthur Dorros
- *365 Penguins* by Jean-Luc Fromental and Joelle Jolivet
- *Millions of Cats* by Wanda Gag
- *Ten Little Ladybugs* by Melanie Gerth
- *How Many Stars in the Sky?* By Lenny Hort
- *The Hundred Penny Box* by Sharon Bell Mathis
- *A Million Fish ... More or Less* by Patricia C. McKissack
- *The Toothpaste Millionaire* by Jean Merrill
- *The Millionth Egg* by Bernice Myers
- *The Penny Pot* by Stuart J. Murphy
- *If You Made a Million* by David M. Schwartz
- *98, 99, 100...Ready or Not, Here I Come!* By Teddy Slater
- *From One to 100* by Teri Sloat
- *Ten Monsters in a Bed* by Roxanne Lanczak Williams
- *One Tortoise, Ten Wallabies* by Jakki Wood

Grade Level: PreK – 2nd grade

Procedures:

1. Partners who work with similar age groups should select one book.
2. Read it.
3. Brainstorm ways that the book could be used to illustrate the concept of place value. Share with others at your table.
4. Select another book. Repeat the procedure.



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Questions:

- What standard does the activity address?
- What does a child need to know mathematically to do the activity?
- What evidence will you note that shows a child is learning the mathematics in the activity?

NAME _____

Activity 6 Recording Sheet

Review children's responses to the place value problems

Task	What does the child understand about place value?	What does the child still need to know?	What activities/games would be helpful to increase his/her understanding?
<p><u>Problem:</u> Yesterday we wrote the numeral "39" on our "days in school" chart. How would we write today's number?</p> <p><u>Answer:</u> "410" "forty ten"</p>			



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Task	What does the child understand about place value?	What does the child still need to know?	What activities/games would be helpful to increase his/her understanding?
<p>Problem: (Show the numeral 42. Point to the digit 4) Use your counters to show how many this is. (Point to the digit 2) Use your counters to show how many this is.</p> <p><u>Answer:</u></p> 			

NAME _____

Task	What does the child understand about place value?	What does the child still need to know?	What activities/games would be helpful to increase his/her understanding?
<p><u>Problem:</u> How many ways can you show 125 using place value blocks?</p> <p><u>Answer:</u> There are only 5 ways.</p>			



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Task	What does the child understand about place value?	What does the child still need to know?	What activities/games would be helpful to increase his/her understanding?
<p><u>Problem:</u> (Place 36 tiles on the table) How many groups of ten can you make? How many are left over? How many would you have if I gave you ten more tiles? How could you find out?</p> <p><u>Answer:</u> Student made groups correctly. She counted out ten more to answer the question, and correctly said 46.</p>			

NAME _____

Task	What does the child understand about place value?	What does the child still need to know?	What activities/games would be helpful to increase his/her understanding?
<p><u>Problem:</u> Find 37 on the hundreds chart. How could you count up from 37 to 58?</p> <p><u>Answer:</u> Begin with 37, then say... 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58.</p>			



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Base Ten and Place Value Exit Ticket

Because of this workshop...

- I will keep doing –

- I will start doing –

- I will stop doing –



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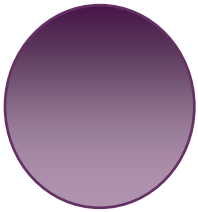
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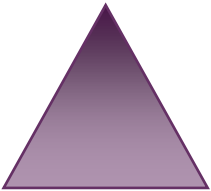
Plan of Action



Something that squares with your beliefs



Something going 'round in your head



Three things you will try and when:

- 1.
- 2.
- 3.



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