

Subtraction Strategies: Break to make 10

(Subtracting within 20 – Harder Facts)

Sometimes it is confusing when the number you are subtracting is greater than the number in the ones place of the number you are subtracting from. For example, if you are trying to subtract 5 from 13, the 5 is greater than the 3? What do you do? →

One strategy is to “break to make 10.” Break 3 off of the 5 and subtract that from 13, that makes 10. Then subtract the 2 you have left from 10 to make 8. $13 - 5 = 8$.

$13 - 5 = ?$	Oh no! the 5 is greater than the 3!
$13 - 3 - 2 = ?$	You can break 5 into 3 and 2 to make it easier.
$13 - 3 = 10$	First subtract the 3 to get down to 10.
$10 - 2 = 8$	Then subtract the 2 from 10 to get the final answer. That’s one way to figure out $13 - 5 = 8$.

“Break to make 10” can help you figure out these tricky problems while you are learning them!

$20 - 0 = 20$	$19 - 0 = 19$	$18 - 0 = 18$	$17 - 0 = 17$	$16 - 0 = 16$	$15 - 0 = 15$	$14 - 0 = 14$	$13 - 0 = 13$	$12 - 0 = 12$	$11 - 0 = 11$
$20 - 1 = 19$	$19 - 1 = 18$	$18 - 1 = 17$	$17 - 1 = 16$	$16 - 1 = 15$	$15 - 1 = 14$	$14 - 1 = 13$	$13 - 1 = 12$	$12 - 1 = 11$	$11 - 1 = 10$
$20 - 2 = 18$	$19 - 2 = 17$	$18 - 2 = 16$	$17 - 2 = 15$	$16 - 2 = 14$	$15 - 2 = 13$	$14 - 2 = 12$	$13 - 2 = 11$	$12 - 2 = 10$	$11 - 2 = 9$
$20 - 3 = 17$	$19 - 3 = 16$	$18 - 3 = 15$	$17 - 3 = 14$	$16 - 3 = 13$	$15 - 3 = 12$	$14 - 3 = 11$	$13 - 3 = 10$	$12 - 3 = 9$	$11 - 3 = 8$
$20 - 4 = 16$	$19 - 4 = 15$	$18 - 4 = 14$	$17 - 4 = 13$	$16 - 4 = 12$	$15 - 4 = 11$	$14 - 4 = 10$	$13 - 4 = 9$	$12 - 4 = 8$	$11 - 4 = 7$
$20 - 5 = 15$	$19 - 5 = 14$	$18 - 5 = 13$	$17 - 5 = 12$	$16 - 5 = 11$	$15 - 5 = 10$	$14 - 5 = 9$	$13 - 5 = 8$	$12 - 5 = 7$	$11 - 5 = 6$
$20 - 6 = 14$	$19 - 6 = 13$	$18 - 6 = 12$	$17 - 6 = 11$	$16 - 6 = 10$	$15 - 6 = 9$	$14 - 6 = 8$	$13 - 6 = 7$	$12 - 6 = 6$	$11 - 6 = 5$
$20 - 7 = 13$	$19 - 7 = 12$	$18 - 7 = 11$	$17 - 7 = 10$	$16 - 7 = 9$	$15 - 7 = 8$	$14 - 7 = 7$	$13 - 7 = 6$	$12 - 7 = 5$	$11 - 7 = 4$
$20 - 8 = 12$	$19 - 8 = 11$	$18 - 8 = 10$	$17 - 8 = 9$	$16 - 8 = 8$	$15 - 8 = 7$	$14 - 8 = 6$	$13 - 8 = 5$	$12 - 8 = 4$	$11 - 8 = 3$
$20 - 9 = 11$	$19 - 9 = 10$	$18 - 9 = 9$	$17 - 9 = 8$	$16 - 9 = 7$	$15 - 9 = 6$	$14 - 9 = 5$	$13 - 9 = 4$	$12 - 9 = 3$	$11 - 9 = 2$
$20 - 10 = 10$	$19 - 10 = 9$	$18 - 10 = 8$	$17 - 10 = 7$	$16 - 10 = 6$	$15 - 10 = 5$	$14 - 10 = 4$	$13 - 10 = 3$	$12 - 10 = 2$	$11 - 10 = 1$

These problems can be a little tricky! Try breaking the number you are subtracting. Subtract part of it to get down to 10, and then subtract the rest from 10.

$$12 - 4 =$$

$$13 - 5 =$$

$$12 - 6 =$$

$$11 - 4 =$$

$$16 - 8 =$$

$$14 - 7 =$$

$$15 - 7 =$$

$$18 - 9 =$$

$$17 - 9 =$$

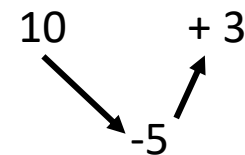
Subtraction Strategies: Subtract from 10 then Add

(Subtracting within 20 – Harder Facts)

Sometimes it is confusing when the number you are subtracting is greater than the number in the ones place of the number you are subtracting from. For example, if you are trying to subtract 5 from 13, the 5 is greater than the 3? What do you do? →

One strategy is to “Subtract from 10 then add.” Break the 13 into $10 + 3$. Now you have $10 + 3 - 5$. $10 + 3 - 5$ is the same as $10 - 5 + 3$. So, you can subtract 5 from 10 and then add the 3 back in. $10 - 5 = 5$. $5 + 3 = 8$. So, $13 - 5 = 8$.

$13 - 5$ is the same as $(10 + 3) - 5$.



$$10 - 5 = 5$$

$$5 + 3 = 8$$

“Subtract from 10 then Add” can help you figure out these tricky problems while you are learning them!

$20 - 0 = 20$	$19 - 0 = 19$	$18 - 0 = 18$	$17 - 0 = 17$	$16 - 0 = 16$	$15 - 0 = 15$	$14 - 0 = 14$	$13 - 0 = 13$	$12 - 0 = 12$	$11 - 0 = 11$
$20 - 1 = 19$	$19 - 1 = 18$	$18 - 1 = 17$	$17 - 1 = 16$	$16 - 1 = 15$	$15 - 1 = 14$	$14 - 1 = 13$	$13 - 1 = 12$	$12 - 1 = 11$	$11 - 1 = 10$
$20 - 2 = 18$	$19 - 2 = 17$	$18 - 2 = 16$	$17 - 2 = 15$	$16 - 2 = 14$	$15 - 2 = 13$	$14 - 2 = 12$	$13 - 2 = 11$	$12 - 2 = 10$	$11 - 2 = 9$
$20 - 3 = 17$	$19 - 3 = 16$	$18 - 3 = 15$	$17 - 3 = 14$	$16 - 3 = 13$	$15 - 3 = 12$	$14 - 3 = 11$	$13 - 3 = 10$	$12 - 3 = 9$	$11 - 3 = 8$
$20 - 4 = 16$	$19 - 4 = 15$	$18 - 4 = 14$	$17 - 4 = 13$	$16 - 4 = 12$	$15 - 4 = 11$	$14 - 4 = 10$	$13 - 4 = 9$	$12 - 4 = 8$	$11 - 4 = 7$
$20 - 5 = 15$	$19 - 5 = 14$	$18 - 5 = 13$	$17 - 5 = 12$	$16 - 5 = 11$	$15 - 5 = 10$	$14 - 5 = 9$	$13 - 5 = 8$	$12 - 5 = 7$	$11 - 5 = 6$
$20 - 6 = 14$	$19 - 6 = 13$	$18 - 6 = 12$	$17 - 6 = 11$	$16 - 6 = 10$	$15 - 6 = 9$	$14 - 6 = 8$	$13 - 6 = 7$	$12 - 6 = 6$	$11 - 6 = 5$
$20 - 7 = 13$	$19 - 7 = 12$	$18 - 7 = 11$	$17 - 7 = 10$	$16 - 7 = 9$	$15 - 7 = 8$	$14 - 7 = 7$	$13 - 7 = 6$	$12 - 7 = 5$	$11 - 7 = 4$
$20 - 8 = 12$	$19 - 8 = 11$	$18 - 8 = 10$	$17 - 8 = 9$	$16 - 8 = 8$	$15 - 8 = 7$	$14 - 8 = 6$	$13 - 8 = 5$	$12 - 8 = 4$	$11 - 8 = 3$
$20 - 9 = 11$	$19 - 9 = 10$	$18 - 9 = 9$	$17 - 9 = 8$	$16 - 9 = 7$	$15 - 9 = 6$	$14 - 9 = 5$	$13 - 9 = 4$	$12 - 9 = 3$	$11 - 9 = 2$
$20 - 10 = 10$	$19 - 10 = 9$	$18 - 10 = 8$	$17 - 10 = 7$	$16 - 10 = 6$	$15 - 10 = 5$	$14 - 10 = 4$	$13 - 10 = 3$	$12 - 10 = 2$	$11 - 10 = 1$

These problems can be a little tricky! Try subtracting from 10 and then adding to see if that makes them easier. First break the 10 off of the larger number and subtract from that. Then add the number you broke from the 10, back in.

$$13 - 8 =$$

$$15 - 7 =$$

$$14 - 6 =$$

$$11 - 5 =$$

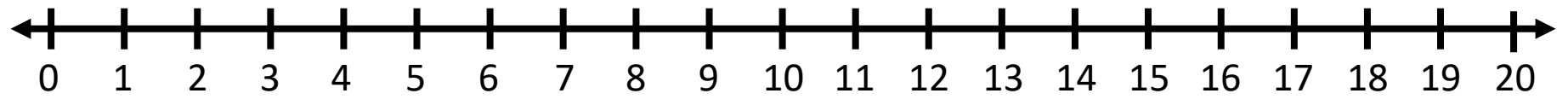
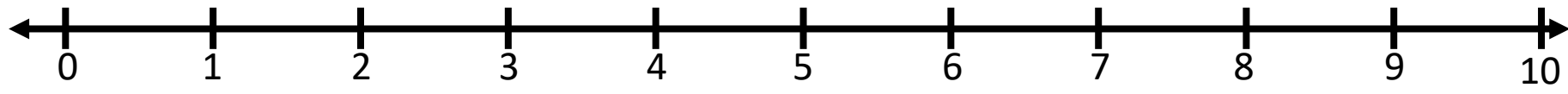
$$12 - 4 =$$

$$17 - 9 =$$

$$13 - 6 =$$

$$11 - 9 =$$

$$16 - 8 =$$



Flashcard Maze

Materials needed:

- Flashcards
- 6-sided die
- Game pieces

Prep:

Lay out the flashcards in a maze, face down.

To Play:

Take turns rolling the dice and moving that number of spaces on the maze. When you land on a card, turn it over and answer the problem. If you get it correct, leave the card face up. If you get it wrong, you have to go back to where you were before you rolled.

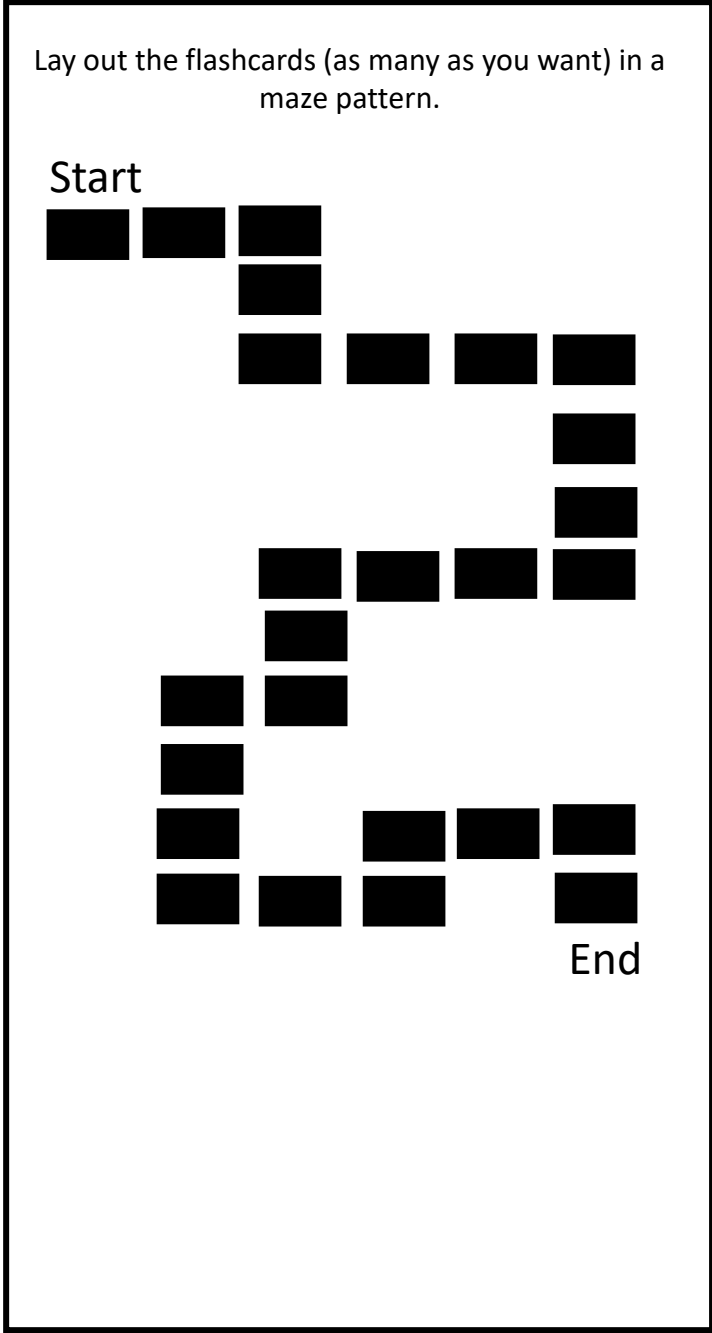
If you land on a card that has already been turned over, you must say a problem that would have the same answer as the card where you landed. For example, if you land on "5 - 3," but it has already answered. You can say "5 - 3 = 2, and 8 - 6 also equals 2."

If you land on a "- 0 card," move 2 spaces back (but do not turn over that card).

If you land on a "halves" card (for example 16 - 8) move 2 more spaces forward (but do not turn over that card).

To win:

First player to complete the maze wins.



I Spy (Subtraction Strategies – 10 - 20)

Materials needed:

- Flash cards

Prep:

Lay out 9 flashcards in an array, face up. Put the rest of the cards in a stack face down where everyone can reach them.

To Play:

1st player draws a card and answers the problem. If he gets it right, he keeps the card and he looks at the array. He can pick up any other cards on the array that have the same answer as the card he drew. (Replace any picked up cards with cards from the draw stack.)

If he misses the problem, put the card back on the bottom of the draw pile.

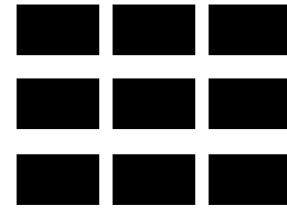
If he accidentally picks up a card that does not have the same answer as the card he drew, he must put any cards he picked up from the array back in the array.

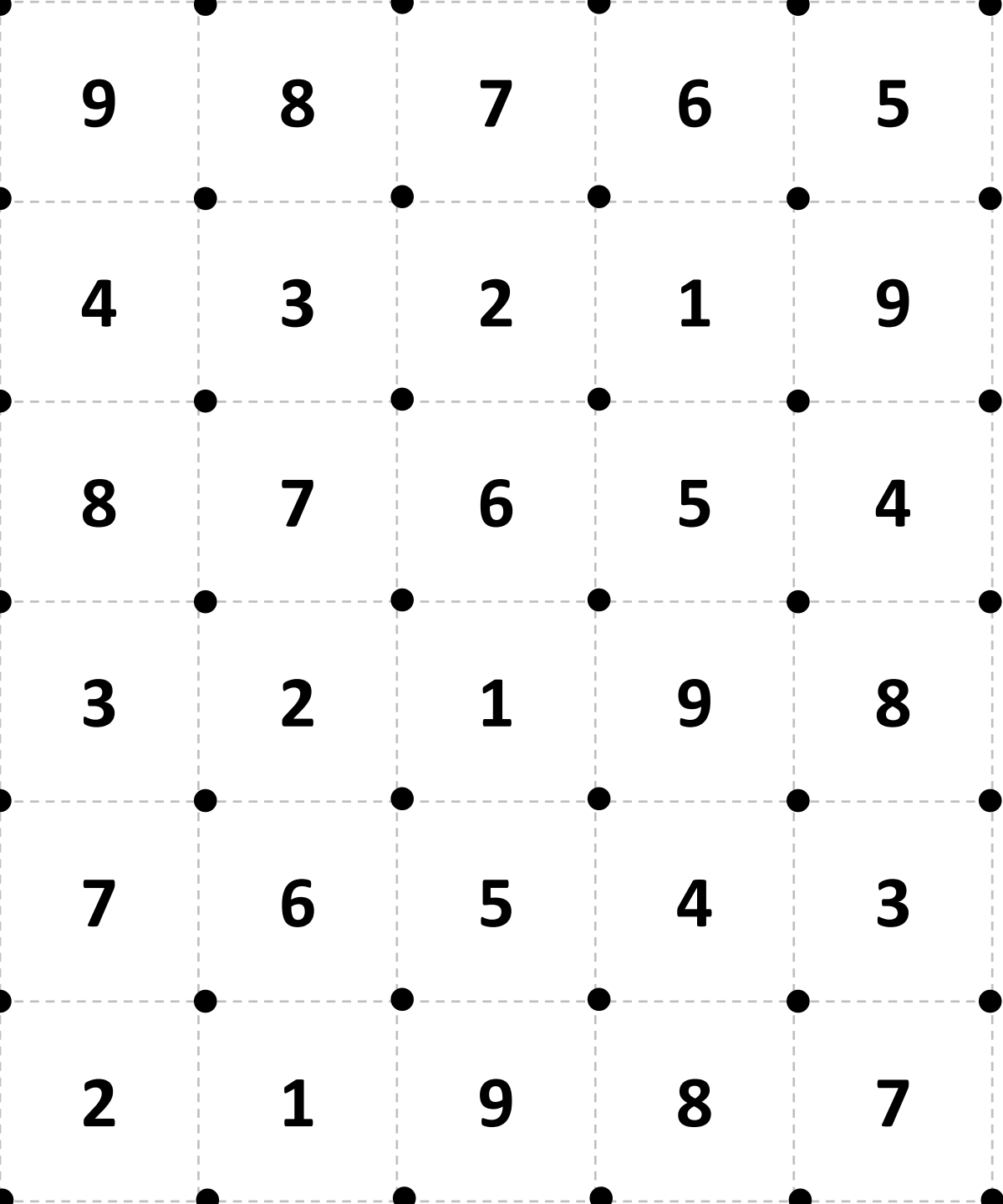
Player 2 does the same and so on.

To win:

First player to get 20 cards wins. Or you can play to a certain time limit or until you run out of cards – then the person with the most cards wins.

Lay out 9 flashcards in an array, face up.





Capture the Box

Break to make 10 or Subtract from 10 first

Materials needed:

- Capture the box gameboard
- Subtraction Strategies flash cards (Well-shuffled)
- Dry erase markers/erasers – different color for each player

To Play:

Place the flashcards face down in a draw pile where everyone can reach them.

Take turns doing the following:

Draw a card and answer the problem. If you get it wrong, put the card back on the bottom of the stack. If you get it right, draw a line on one side of the box that contains the answer.

If your line completes a box, that means you capture it and get to put your initials in it. If the line completes two boxes, you capture/initial both boxes.

If there are no lines you can draw with your roll, you can't play, and the next player draws.

To win:

Play until all boxes have been captured or you run out of time. The player who captures the most boxes wins.

The Great Turtle Race – Break to make 10 or Subtract 10 first

Materials Needed:

- Turtle Race game boards
- 6-sided die
- Dry erase boards/Markers/Erasers
- 6 “Turtles” (game counters) per player

To play:

Each Player puts a turtle (game counter) in the first space of each “lane” on his/her racing card.

Player 1 rolls the die and answers the math problem in the next available space in the lane with the number corresponding to the roll of the dice. If the answer is correct, move the turtle for that lane one space forward. Then it is player 2's turn.







AS ALWAYS: Any player who rolls the dice off the table loses a turn.

To win: First player to get 3 turtles across the finish line wins.



The Great Turtle Race



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

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The Great Turtle Race



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

Roll and Bump – Break to make 10 or Subtract from 10 first

Materials needed:

- 6 - sided die
- Game board
- Game Pieces
- Counters – different color for each player, 8 each

To play:

Players take turns rolling the die, moving that number of spaces and solving the problem where they land.

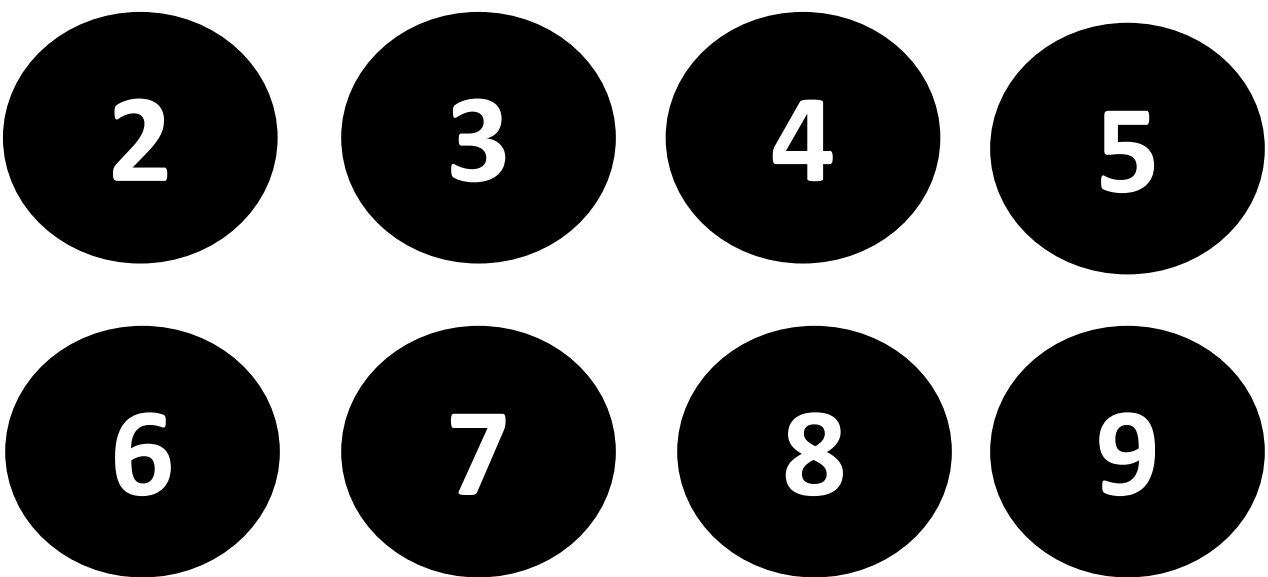
When a player answers a problem correctly, he/she puts one of his/her counters on the answer in the middle of the Board.

When another player answers a problem with the same answer, he/she “bumps” the first player’s counter off of the number and replaces it with his/her own.

If the numbers on the board are not all covered up by the time the players get back around to “START” just keep going. If a player lands on “START” he/she gets a free “bump” or can cover up any number that has not been covered yet.

To win: The player with the most counters on the board when the last number gets covered up is the winner.

Alternate way to win: Player who covers up the last number wins.

START	11 - 9	11 - 8	11 - 7	11 - 6	11 - 5	11 - 4	11 - 3	11 - 2	12 - 9
16 - 9									12 - 8
15 - 6									12 - 7
15 - 7									16 - 7
15 - 8									12 - 5
15 - 9									12 - 4
14 - 5									12 - 3
14 - 6									17 - 8

$$11 - 9 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$11 - 8 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$11 - 7 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$11 - 6 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$11 - 5 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$11 - 4 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$11 - 3 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$11 - 2 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$12 - 9 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$12 - 8 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$12 - 7 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$12 - 6 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$12 - 5 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$12 - 4 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$12 - 3 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$13 - 9 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$13 - 8 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$13 - 7 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$13 - 6 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$13 - 5 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$13 - 4 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$14 - 9 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$14 - 8 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$14 - 7 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$14 - 6 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$14 - 5 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$15 - 9 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

$$15 - 8 =$$

$$25 - 7 =$$

$$15 - 6 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

Subtraction Strategies – break to make 10 or subtract from 10 first

Subtraction Strategies – break to make 10 or subtract from 10 first

$$16 - 9 =$$

$$16 - 8 =$$

$$16 - 7 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

Subtraction Strategies – break to make 10 or subtract from 10 first

Subtraction Strategies – break to make 10 or subtract from 10 first

$$17 - 9 =$$

$$17 - 8 =$$

$$18 - 9 =$$

Subtraction Strategies – break to make 10 or subtract from 10 first

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Subtraction Strategies – break to make 10 or subtract from 10 first

