Subtraction Strategies – 10 and Within

The strategies in this packet can help you answer these problems more efficiently.

You can use this table to check your work.

10 – 0 = 10	9 – 0 = 9	8 – 0 = 8	7 – 0 = 7	6 – 0 = 6	5 – 0 = 5	4 – 0 = 4	3 – 0 = 3	2 – 0 = 2	1 – 0 = 1
10 – 1 = 9	9 – 1 = 8	8 – 1 = 7	7 – 1 = 6	6 – 1 = 5	5 – 1 = 4	4 – 1 = 3	3 – 1 = 2	2 – 1 = 1	1 – 1 = 0
10 – 2 = 8	9 – 2 = 7	8 – 2 = 6	7 – 2 = 5	6 – 2 = 4	5 – 2 = 3	4 – 2 = 2	3 – 2 = 1	2 – 2 = 0	
10 – 3 = 7	9 – 3 = 6	8 – 3 = 5	7 – 3 = 4	6 – 3 = 3	5 – 3 = 2	4 – 3 = 1	3 – 3 = 0		
10 – 4 = 6	9 – 4 = 5	8 – 4 = 4	7 – 4 = 3	6 – 4 = 2	5 – 4 = 1	4 – 4 = 0			
10 – 5 = 5	9 – 5 = 4	8 – 5 = 3	7 – 5 = 2	6 – 5 = 1	5 – 5 = 0				
10 – 6 = 4	9 – 6 = 3	8 – 6 = 2	7 – 6 = 1	6 – 6 = 0					
10 – 7 = 3	9 – 7 = 2	8 – 7 = 1	7 – 7 = 0						
10 – 8 = 2	9 – 8 = 1	8 – 8 = 0							
10 – 9 = 1	9 - 9 = 0								
10 – 10 = 0									

Printing: Black & White, landscape, 2-sided, flip on short edge.

Subtraction Strategies – 10 and Within

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Subtraction Strategies: Learn the easiest facts first

There are 3 rules of subtraction that are really easy to remember. Learn them first and you are on your way!

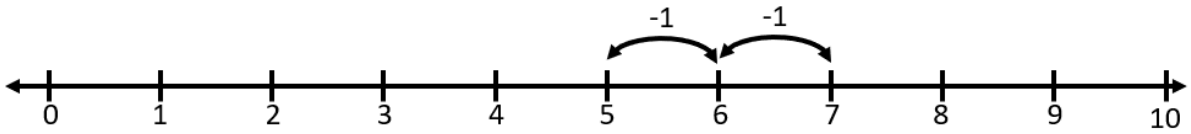
A number minus 0 stays the same. So, 8 – 0 = 8, 9 – 0 = 9 and so on.

10 – 0 = 10	9 – 0 = 9	8 – 0 = 8	7 – 0 = 7	6 – 0 = 6	5 – 0 = 5	4 – 0 = 4	3 – 0 = 3	2 – 0 = 2	1 – 0 = 1

A number minus itself is always 0. So, 10 – 10 = 0, 9 – 9 = 0 and so on.

10 – 10 = 0	9 – 9 = 0	8 – 8 = 0	7 – 7 = 0	6 – 6 = 0	5 – 5 = 0	4 – 4 = 0	3 – 3 = 0	2 – 2 = 0	1 – 1 = 0

A number minus 1 is always the number that comes before when you are counting. So, like you see in the number line below, 7 – 1 = 6, 6 – 1 = 5 and so on.



10 – 1 = 9	9 – 1 = 8	8 – 1 = 7	7 – 1 = 6	6 – 1 = 5	5 – 1 = 4	4 – 1 = 3	3 – 1 = 2	2 – 1 = 1	1 – 1 = 0

Way to go! Just by learning these 3 easy rules, you now know all the shaded subtraction facts!

10 – 0 = 10	9 – 0 = 9	8 – 0 = 8	7 – 0 = 7	6 – 0 = 6	5 – 0 = 5	4 – 0 = 4	3 – 0 = 3	2 – 0 = 2	1 – 0 = 1
10 – 1 = 9	9 – 1 = 8	8 – 1 = 7	7 – 1 = 6	6 – 1 = 5	5 – 1 = 4	4 – 1 = 3	3 – 1 = 2	2 – 1 = 1	1 – 1 = 0
10 – 2 = 8	9 – 2 = 7	8 – 2 = 6	7 – 2 = 5	6 – 2 = 4	5 – 2 = 3	4 – 2 = 2	3 – 2 = 1	2 – 2 = 0	
10 – 3 = 7	9 – 3 = 6	8 – 3 = 5	7 – 3 = 4	6 – 3 = 3	5 – 3 = 2	4 – 3 = 1	3 – 3 = 0		
10 – 4 = 6	9 – 4 = 5	8 – 4 = 4	7 – 4 = 3	6 – 4 = 2	5 – 4 = 1	4 – 4 = 0			
10 – 5 = 5	9 – 5 = 4	8 – 5 = 3	7 – 5 = 2	6 – 5 = 1	5 – 5 = 0				
10 – 6 = 4	9 – 6 = 3	8 – 6 = 2	7 – 6 = 1	6 – 6 = 0					
10 – 7 = 3	9 – 7 = 2	8 – 7 = 1	7 – 7 = 0						
10 – 8 = 2	9 – 8 = 1	8 – 8 = 0							
10 – 9 = 1	9 - 9 = 0								
10 – 10 = 0									

Here are a few practice problems. These should be a snap if you remember the three simple rules!

10 – 0 =	**6 – 6 =**	**5 – 1 =**
4 – 4 =	**9 – 9 =**	**7 – 0 =**
2 – 1 =	**3 – 0 =**	**8 – 1 =**

Subtraction Strategies: Think Addition to Subtract

Some subtraction facts and addition facts have a relationship to each other. We call these groups of facts that go together "Fact Families." Sometimes you will see this relationship explained as a "number bond." Like the picture to the right (→).

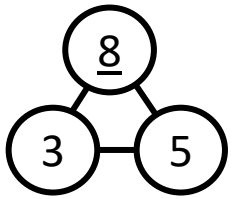
If you understand about fact families and number bonds, you can figure out four different math facts (two addition facts and two subtraction facts) if you only know one!

You have already worked hard to learn your addition facts. Once you know those, you can use them to help you figure out your subtraction facts by thinking of the addition fact that is in the same Fact Family.

Here's how it works. Let's say you are trying to solve the subtraction problem 8 – 3 = ? You already know the addition fact " 3 + 5 = 8," so you can **think addition to subtract** and ask yourself, "3 plus WHAT equals 8?" You already know the answer to that! It's 5!

The addition fact "**3 + 5 = 8"** and subtraction fact "**8 – 3 = 5"** are in the same fact family!

Number Bond



Fact Family

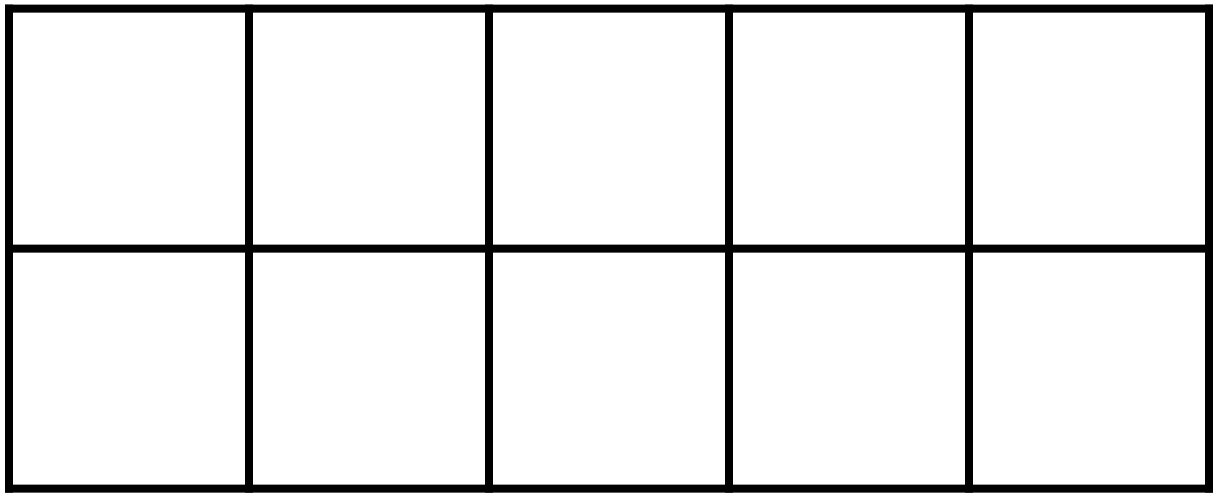
3 + 5 = 8	5 + 3 = 8
8 – 3 = 5	8 – 5 = 3

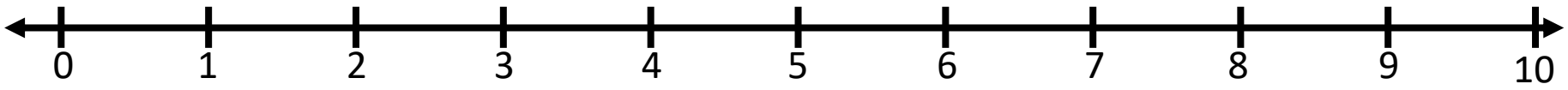
If you already know your addition facts, you can use the "think addition to subtract" strategy to figure out all the shaded subtraction facts!

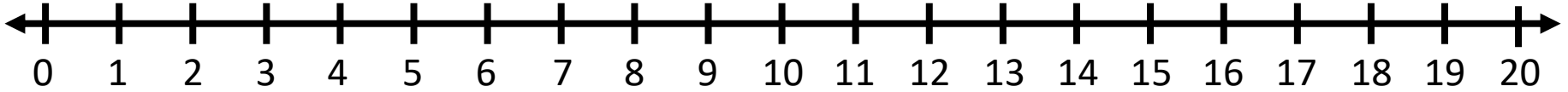
10 – 0 = 10	9 – 0 = 9	8 – 0 = 8	7 – 0 = 7	6 – 0 = 6	5 – 0 = 5	4 – 0 = 4	3 – 0 = 3	2 – 0 = 2	1 – 0 = 1
10 – 1 = 9	9 – 1 = 8	8 – 1 = 7	7 – 1 = 6	6 – 1 = 5	5 – 1 = 4	4 – 1 = 3	3 – 1 = 2	2 – 1 = 1	1 – 1 = 0
10 – 2 = 8	9 – 2 = 7	8 – 2 = 6	7 – 2 = 5	6 – 2 = 4	5 – 2 = 3	4 – 2 = 2	3 – 2 = 1	2 – 2 = 0	
10 – 3 = 7	9 – 3 = 6	8 – 3 = 5	7 – 3 = 4	6 – 3 = 3	5 – 3 = 2	4 – 3 = 1	3 – 3 = 0		
10 – 4 = 6	9 – 4 = 5	8 – 4 = 4	7 – 4 = 3	6 – 4 = 2	5 – 4 = 1	4 – 4 = 0			
10 – 5 = 5	9 – 5 = 4	8 – 5 = 3	7 – 5 = 2	6 – 5 = 1	5 – 5 = 0				
10 – 6 = 4	9 – 6 = 3	8 – 6 = 2	7 – 6 = 1	6 – 6 = 0					
10 – 7 = 3	9 – 7 = 2	8 – 7 = 1	7 – 7 = 0						
10 – 8 = 2	9 – 8 = 1	8 – 8 = 0							
10 – 9 = 1	9 - 9 = 0								
10 – 10 = 0									

If you don’t know an answer, see if you can use your knowledge of fact families to figure it out!

10 – 2 = ___ **2 + ___ = 10**	**7 – 4 = ___** **4 + ___ = 7**	**5 – 2 = ___** **2 + ___ = 5**
8 – 5 = ___ **5 + ___ = 8**	**6 – 4 = ___** **4 + ___ = 6**	**9 – 6 = ___** **6 + ___ = 9**
7 – 5 = ___ **5 + ___ = 7**	**9 – 5 = ___** **5 + ___ = 9**	**8 – 4 = ___** **4 + ___ = 8**




0 1 2 3 4 5 6 7 8 9 10


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

5-in-a-Row (Subtraction Strategies – 10 & Within)

Materials needed:

- Deck of flashcards (Well shuffled)

Object of the game:

Be the first to get 5 cards whose answers make 5-in-a-Row in numerical order. For example, 0 to 5, 1 to 6, 2 to 7.

To Play:

- Make a stack of the flashcards – face down– and put it where everyone can reach it.
- Take turns drawing a card, saying the answer and putting it down in a row in front of you face up. If you get the answer wrong, put it back on the bottom of the deck and it's the other person's turn.
- You are building a row of cards that are in numerical order by answer. For example, 4 – 1 (which is 3), would come right before 6 -2 (which is 4).
- When you get a card that has the same answer as another card you already have, put it on top.

To win:

The first person to have 10 cards (or stacks of cards) in a row wins.

Flashcard Maze (Subtraction Strategies – 10 & Within)

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. You get to stay in that place. If you get it wrong, you have to go back to where you were before you rolled.

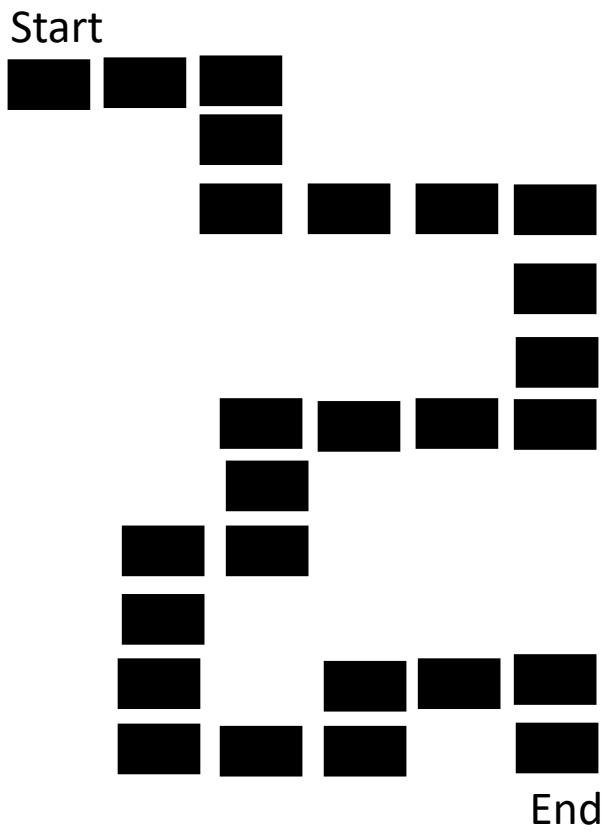
If you land on a card that has already been turned over, you must say a problem that would have the same answer as the card where you landed. For example, if you land on "5 - 3," but it has already answered. You can say "5 – 3 = 2, and 8 – 6 also equals 2."

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

If you land on a number minus itself card (for example 9 – 9) move 2 more spaces forward (but do not turn over that card).

To win:
First player to complete the maze wins.

Lay out the flashcards (as many as you want) in a maze pattern.



I Spy (Subtraction Strategies – 10 & Within)

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.)

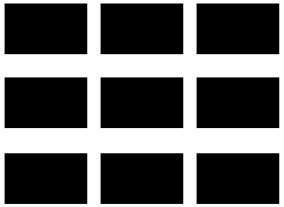
If he misses the problem, put the card back on the bottom of the draw pile.

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.



6	5	4	3	2
6	6	7	8	1
1	5	10	9	0
2	4	3	2	1
3	4	5	6	0
1	2	3	4	5

Capture the Box

Subtraction Strategies 10 & Within

Materials needed:

- Capture the box gameboard
- Subtraction Strateigies 10 & Within 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, but 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.

Go Fish with Subtraction Siblings (Subtraction Strategies: 10 & Within)

Materials Needed:

- Deck of Subtraction Flash Cards – Well Shuffled

Object of the Game: to be the first one to make 5 pairs of "Subtraction Siblings" – two subtraction problems that are in the same fact family, for example: "6 – 4 = 2" and "6 – 2 = 4."

To Play:

Deal each player 7 cards. The players should be able to see the cards in their own hands, but players should not be able to see each other's cards.

Spread the rest of the cards face down in between the two players. This is the "fishing pond." (Or if you want to, you can put them in a stack face down.)

You are trying to make pairs of "subtraction siblings" – two subtraction problems that are in the same fact family, for example: "6 – 4 = 2" and 6 – 2 = 4." When you make a pair, you set those two cards aside, they are protected and no one can ask for them.

All the players should look at their hands – if they already have some pairs, they should put them aside.

The first player asks one other player for a card. They should say, for example, "I have 6 – 4, which equals 2. Do you have 6 – 2 which equals 4?" If the other player has the sibling card, they must give it to the one asking for it. Then that player makes a pair and sets it aside. If the player gets the card he/she asks for, he/she gets to ask again.

If the player being asked does not have the card requested, he/she should say "Go fish!" Then the asking player must draw one card from the fish pond and it is the next player's turn to ask for a card.

To win: The first player to make 5 pairs wins.

Subtraction Battle (Subtraction Strategies: 10 & Within)

Materials Needed:

- One or two decks of cards – Face cards removed. Aces = 1. They do not have to be complete decks.

To Play:

Shuffle the cards and put them face down in a stack in the middle.

Each player draws 2 cards and subtracts the least from the greatest. For example, if I draw a 9 and a 5, I subtract 9 – 5. Whoever has the largest difference wins all 4 cards.

If it is a tie, then each player draws 2 more cards and subtracts, the winner of that round wins all 4 cards from that round and the round before.

To win: Play until you have used all the cards. Then the player with the most cards wins.

What's under my thumb? (Subtraction Strategies: 10 & Within)

Materials Needed:

- A set of 9/9 dominos
- White board/markers/erasers

To play:

Turn all the dominos face down and spread them out on the table between the players.

The first player draws a domino, but does not show it to the other player. He/she adds the two sides of the domino together and then covers one side of the domino with her thumb. For example, if the domino is a 6|2, the sum would be 8. The player might decide to cover up the 2.

The player then shows the domino with the 2 covered up and only the 6 showing to the other player and says, "8 is the sum, what's under my thumb?" The other player has to use subtraction to figure out that if the 6 is showing, the other number must be a 2. If the second player gets the question right, he/she writes the answer on his/her white board. Then it is the second player's turn to draw a domino…

To win: Once all the dominos have been used. The players make pairs of 10 out of the answers they have written on their white boards. Players get a point for each pair of answers that add up to 10. For example, if one player had 1, 5, 7, 3, 5, 4, and 9. that would be 3 pairs that add up to 10 (1 + 9), (5 + 5), (7 + 3). The 4 would be left over. So that player has 3 points.

The Great Turtle Race – (Subtraction Strategies: 10 & Within)

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	9 – 2 =	9 – 3 =	8 – 3 =	7 – 4 =	8 – 4 =	9 – 4 =	Finish!
2	9 – 7 =	9 – 8 =	6 - 5 =	7 - 5 =	8 - 5 =	9 - 5 =	Finish!
3	8 – 6 =	6 – 1 =	6 - 6 =	7 - 6 =	8 - 2 =	9 - 6 =	Finish!
4	7 – 3 =	7 – 2 =	7 – 1 =	7 - 7 =	8 - 7 =	9 - 2 =	Finish!
5	5 – 2 =	5 – 3 =	10 – 6 =	8 – 1 =	8 - 8 =	9 – 1 =	Finish!
6	10 – 4 =	9 – 0 =	10 - 3	10 – 7 =	8 – 0 =	3 – 2 =	Finish!

The Great Turtle Race – (Subtraction Strategies: 10 & Within)

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- Dry erase boards/Markers/Erasers
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The Great Turtle Race

1	9 – 2 =	9 – 3 =	8 – 3 =	7 – 4 =	8 – 4 =	9 – 4 =	Finish!
2	9 – 7 =	9 – 8 =	6 - 5 =	7 - 5 =	8 - 5 =	9 - 5 =	Finish!
3	8 – 6 =	6 – 1 =	6 - 6 =	7 - 6 =	8 - 2 =	9 - 6 =	Finish!
4	7 – 3 =	7 – 2 =	7 – 1 =	7 - 7 =	8 - 7 =	9 - 2 =	Finish!
5	5 – 2 =	5 – 3 =	10 – 6 =	8 – 1 =	8 - 8 =	9 – 1 =	Finish!
6	10 – 4 =	9 – 0 =	10 - 3	10 – 7 =	8 – 0 =	3 – 2 =	Finish!

Surround the Monsters (Subtraction Strategies: 10 & Within)

Materials needed:

- 2 10-sided dice (0 can be used as 10 or 0 depending on what the player needs)
- Dry erase markers/white board/erasers – different color marker for each player
- Game Board

Object of the game: Capture the most monster eyeballs.

To play:

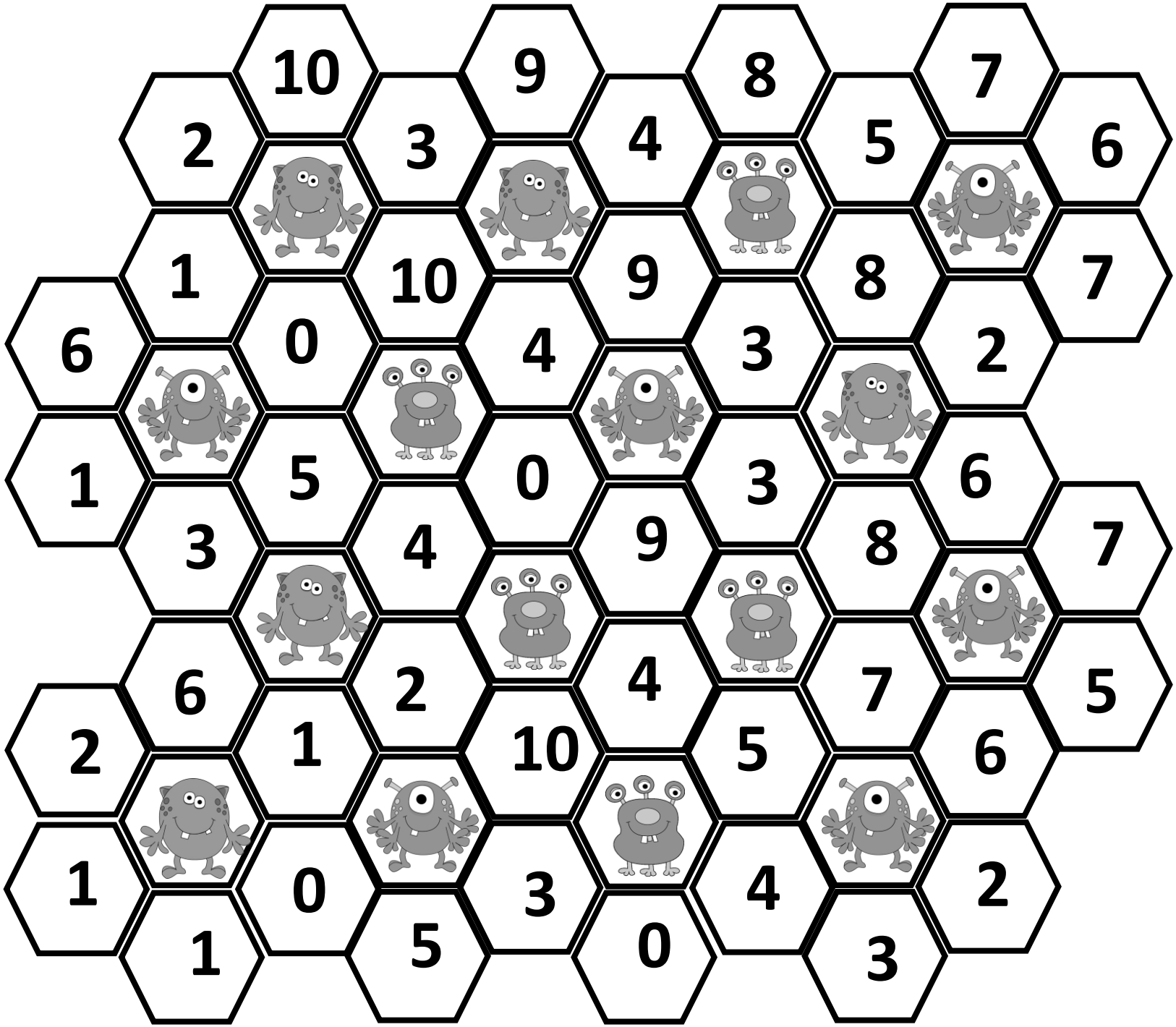
Players take turns rolling both dice, and subtracting the lesser number from the greater number, then marking off a cell with the answer.

When you mark off the last cell to completely surround a monster, you capture that monster. Put an X with your color marker on the monster to show he has been captured. You get 1 point for each eyeball the monster has. If you mark off the last cell that completely surrounds more than one monster, you get credit for both monsters.

If there are no more cells with the number you need, it is the next player's turn.

To win:

First player to score 10 points wins.


10 9 8 7
2 3 4 5 6
1 10 9 8 7
6 0 4 3 2
1 5 0 3 6
3 4 9 8 7
6 2 4 7 5
2 1 10 5 6
1 0 3 4 2
1 5 0 3

10 – 0 =	10 – 3 =	10 – 6 =
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within
10 – 1 =	10 – 4 =	10 – 7 =
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within
10 – 2 =	10 – 5 =	10 – 8 =
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within

10 – 9 = Subtraction Strategies: 10 & Within	**9 – 1 =** Subtraction Strategies: 10 & Within	**9 – 4 =** Subtraction Strategies: 10 & Within
10 – 10 = Subtraction Strategies: 10 & Within	**9 – 2 =** Subtraction Strategies: 10 & Within	**9 – 5 =** Subtraction Strategies: 10 & Within
9 – 0 = Subtraction Strategies: 10 & Within	**9 – 3 =** Subtraction Strategies: 10 & Within	**9 – 6 =** Subtraction Strategies: 10 & Within

$9 - 7 =$	$8 - 0 =$	$8 - 3 =$
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within
$9 - 8 =$	$8 - 1 =$	$8 - 4 =$
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within
$9 - 9 =$	$8 - 2 =$	$8 - 5 =$
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within

8 – 6 = Subtraction Strategies: 10 & Within	**7 – 0 =** Subtraction Strategies: 10 & Within	**7 – 3 =** Subtraction Strategies: 10 & Within
8 – 7 = Subtraction Strategies: 10 & Within	**7 – 1 =** Subtraction Strategies: 10 & Within	**7 – 4 =** Subtraction Strategies: 10 & Within
8 – 8 = Subtraction Strategies: 10 & Within	**7 – 2 =** Subtraction Strategies: 10 & Within	**7 – 5 =** Subtraction Strategies: 10 & Within

7 – 6 = Subtraction Strategies: 10 & Within	**6 – 1 =** Subtraction Strategies: 10 & Within	**6 – 4 =** Subtraction Strategies: 10 & Within
7 – 7 = Subtraction Strategies: 10 & Within	**6 – 2 =** Subtraction Strategies: 10 & Within	**6 – 5 =** Subtraction Strategies: 10 & Within
6 – 0 = Subtraction Strategies: 10 & Within	**6 – 3 =** Subtraction Strategies: 10 & Within	**6 – 6 =** Subtraction Strategies: 10 & Within

$5 - 0 =$	$5 - 3 =$	$4 - 0 =$
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within
$5 - 1 =$	$5 - 4 =$	$4 - 1 =$
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within
$5 - 2 =$	$5 - 5 =$	$4 - 2 =$
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within

4 – 3 = Subtraction Strategies: 10 & Within	**3 – 1 =** Subtraction Strategies: 10 & Within	**2 – 0 =** Subtraction Strategies: 10 & Within
4 – 4 = Subtraction Strategies: 10 & Within	**3 – 2 =** Subtraction Strategies: 10 & Within	**2 – 1 =** Subtraction Strategies: 10 & Within
3 – 0 = Subtraction Strategies: 10 & Within	**3 – 3 =** Subtraction Strategies: 10 & Within	**2 – 2 =** Subtraction Strategies: 10 & Within

1 – 0 =	10 – 1 =	10 – 4 =
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within
1 – 1 =	10 – 2 =	10 – 5 =
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within
10 – 0 =	10 – 3 =	10 – 6 =
Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within	Subtraction Strategies: 10 & Within