

## Notes for *Contiguous*

**Level:** Grades 1-3

**Recommended # of Players:** 2-4

**Materials:** *Contiguous* Game Board, 3 dice, 20 transparent chips

**Math Skills:** Addition, Subtraction, Multiplication, and Division.

**Mathematical benefits:**

*Contiguous* requires students to go beyond solving equations; they must create them. This higher level of thinking helps solidify the relationships between operations. Students are also being asked to solve a problem using multiple steps, paving the way for algebraic thinking. Initially, students may be able to use number relationships they are familiar with, but as the board fills up and choices are few, students will need to search for new ways to reach a solution. In *Contiguous*, students are also limited in their play options because they must cover a square next to a previously played square. Often, the equation will not be obvious, and students will need to explore multiple options.

When introducing this game, it may be beneficial for the teacher to model his or her own thinking when considering their play options. It is also helpful to have students talk about their thinking with their peers during game play, and to justify their chip placement. This keeps other players involved and engaged throughout the game.

# Contiguous

**Materials:** Game Board, 3 die, 20 chips

**Objective:** To be the 1<sup>st</sup> player to use up all of his or her chips.

**Rules:**

1. Divide the chips equally between players. If there are left over chips, put them aside.
2. Decide who will go first.
3. Player One rolls the three die and uses any operation(s) to make one of the numbers on the board and covers it with a chip.

Example:

Player One rolls a **3**, **5**, and **4**

$$3 \times 5 = 15 - 4 = 11$$

Player covers the numeral 11.

4. Turn goes to player two.

Player Two rolls a **4**, a **2**, and a **3**

$$4 \div 2 = 2 \times 3 = 6$$

Player covers the numeral 6 as it is contiguous to 11.

5. Turn goes to next player.
6. If a player cannot make a number that can be covered, he must pass. If another player can think of a way to cover a contiguous number with the same three die, he or she may place a chip on the appropriate number. This does not affect any turns.
7. The first player to use up all his or her chips is the winner.

1	2	3	4	5
6	7	8	9	10
11	12	15	16	18
20	24	25	30	36

1	2	3	4	5
6	7	8	9	10
11	12	15	16	18
20	24	25	30	36



# Contiguous

Use any operation with three numbers to cover a number contiguous with another number already on the board.

1	2	3	4	5
6	7	8	9	10
11	12	15	16	18
20	24	25	30	36

First person out of chips wins!

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