

Notes for ZigZag

Level: Grades 1-3

Recommended # of Players: 2

Materials: ZigZag game board, 2 place markers, 1 helper sheet

Math Skills: Addition and subtraction of 3 numbers

Mathematical benefits:

ZigZag is helpful for children who are comfortable adding and subtracting 2 numbers from 1-6 mentally and are ready for the additional challenge of doing this with three numbers. Children have opportunities to add or subtract 3 numbers in various combinations and compare the different sums. Because 3 numbers present many different possibilities, children ideally must perform many sets of calculations in order to play the game successfully. The helper sheets are used to assist children in seeing the different combinations.



For two players

Materials:

- Zigzag board
- 3 dice with numbers 1-6 on each die
- 2 different colored transparent bingo chips

To Play:

1. Players place their chip in the “Start” box.
2. Players decide who will go first.
3. The first player rolls the 3 dice. The 3 numbers rolled can be added or subtracted in any order. For example: if a 2, a 3, and a 4 are rolled, the player could make:

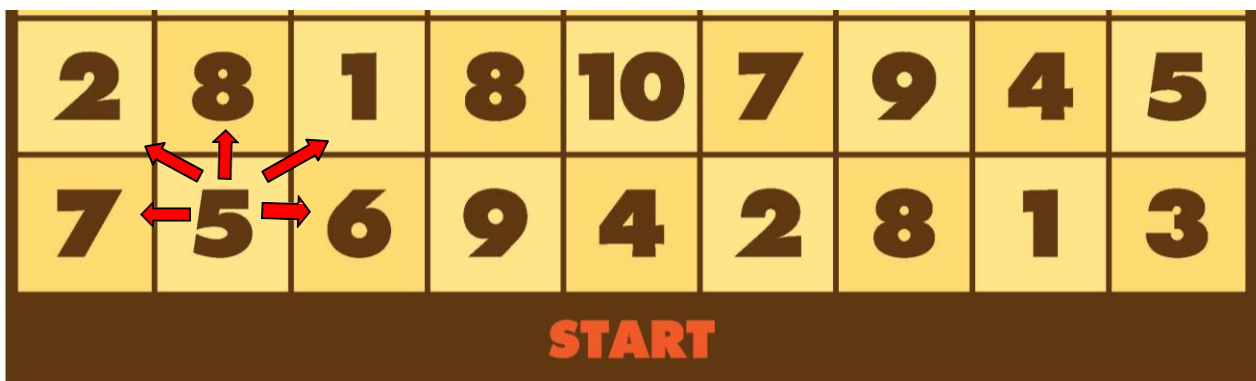
9: $(2+3+4)$

1: $(2+3-4)$ or $(3+2-4)$

3: $(2+4-3)$ or $(4+2-3)$ or $(4-3+2)$ or $(2-3+4)$

5: $(4-2+3)$ or $(4+3-2)$ or $(3-2+4)$ or $(3+4-2)$

4. Players start by making any number in the first row. For example, the player in the above example could choose to put his or her marker on 9, 1, 3, or 5. If a player cannot make a number in the first row, he or she may try again on the next turn.
5. After their first move, players can move only one space to a space that is next to it, moving forward, backward, sideways, or diagonally. In the example shown below, the player on 5 in the first row could move only to the 7, 2, 8, 1, or 6, as shown by the arrows. If a player cannot make one of those numbers, his or her turn is over. Players may not go to a space that is already occupied.



6. The first person to reach an orange “Finish” number is the winner.

ZIGZAG

2 9 7 4 6 8 7 5 9

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

START



