

# Fun With Number Cards!

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Grade Range	Content Areas	Materials
Grades 1 – 4	<ul style="list-style-type: none"><li>• Number</li><li>• Addition</li><li>• Problem-solving</li></ul>	<ul style="list-style-type: none"><li>• Paper</li><li>• Pencil</li><li>• Scissors</li></ul>

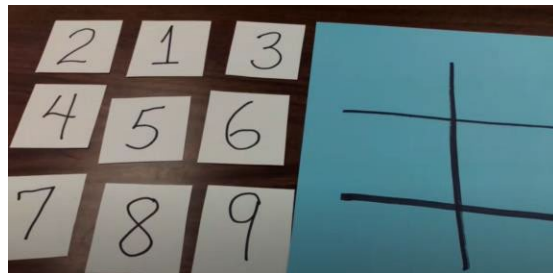
## Activities

Before beginning either activity, create number cards with numbers 0-9. You can write these numbers with anything (pencil, pen, marker, crayons). These numbers should be a consistent size. Cut out the numbers into squares/rectangles.

### Activity 1: Addition Tic-Tac-Toe

Sourced from: [Tic-Tac-Toe Mathematics](#)

**Object of the game:** To place the third number to get a column, row, or diagonal that adds up to 15.



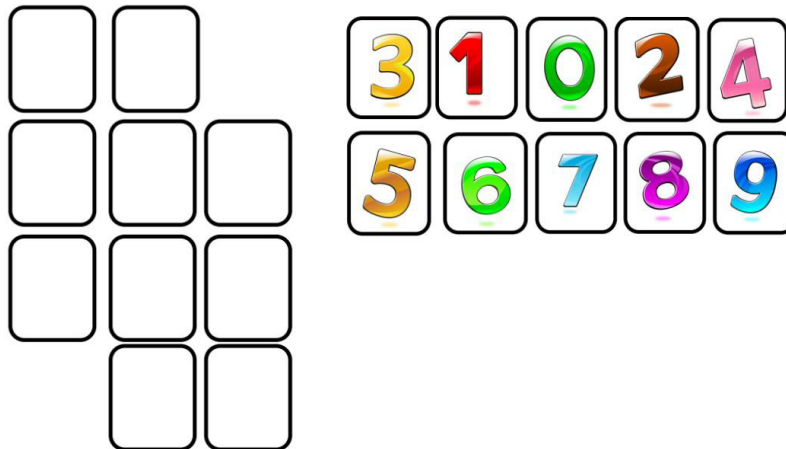
### How to play:

1. You will need numbers 1-9 for this game.
2. Draw a Tic-Tac-Toe board on a piece of paper.
3. Find a partner to play against or play left hand against right hand.
4. This game is played like traditional tic-tac-toe but with addition where players take turns placing numbers on the board.
5. The player who goes first **cannot** place the number 5 in the middle.
6. Take turns placing numbers on the board trying to be the last to add up to 15 in a column, row, or diagonal.

## Activity 2: Next Door Neighbour Numbers

Sourced from: [Problems Worth Solving in a Thinking Classroom](#) (Grade 2 Resources - Activity #13)

**Object of the game:** arrange the cards so that no two consecutive numbers are next to each other, horizontally, vertically, or diagonally.



### How to play:

1. You will need number cards with 0-9 for this problem.
2. Arrange the cards as shown in the picture above (one row of two, two rows of three, and a row of two) without having two consecutive numbers touching (horizontally, vertically, or diagonally).
3. This means 1 cannot be touching 2, 2 cannot be touching 1 or 3, 3 cannot be touching 2 or 4, and so on.

### Extensions, Modifications & Additional Resources

#### Questions for Extension/Reflection

##### **Activity 1: Addition Tic-Tac-Toe** ([Tic-Tac-Toe Mathematics](#))

- Does this addition game work if you try to add up to a different number?
- Is there a best number to play first? In what spot on the board? Why or why not?

##### **Activity 2: Next Door Neighbour Numbers** ([Problems Worth Solving in a Thinking Classroom](#))

- There are multiple solutions to this problem. How many can you find?
- What is the most challenging part of this problem?