

# Roll Across the Finish Line

This is an activity for two or three players.

**Goal:** To collect data, create a chart, and interpret the results.

## You will need:

- A pair of dice
- Pencil and paper
- Ruler (optional)

Number	Tally	Total
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

## What to do:

- Create a tally sheet to record all of the sums that are possible when two dice are rolled and added together.
- Roll a pair of dice fifty times and record the totals on the tally sheet.
- Consider your data and make a bar graph to display your results.
- Play Roll Across the Finish Line, a game for two or three players. You will need two dice, game markers, and a game board. Decide who will be player A, B, and C. The youngest player may roll the dice and total them on every turn or share this job with other players.
  - Player A moves one space if the sum of the two dice is a 2, 3, 4, or 5.
  - Player B moved one space if the sum of the two dices is a 6, 7, or 8.
  - Player C moves one space if the sum of the two dice is a 9, 10, 11, or 12.
- The winner is the first person across the finish line.

## To think about:

- Which sum did you roll most frequently?
- Why do you think certain sums were more frequent? Was it luck or is there a mathematical explanation?

## Other things to try:

- Change the rules of the game so that Players A and C move two spaces each time their numbers are rolled.
- Create new rules for the game so each player has the same chance of winning.

