

Number Races

Topics: Addition, Probability

Materials: Game sheet, colored pencils or crayons, 2 dice per game

Common Core: K.CC.A.2, K.CC.A.3, K.OA.A.2, 1.OA.C.5, 1.OA.C.6, 2.OA.B.2

Choose your numbers and roll the dice to see which number will win the race. Which numbers come up most?

Why we love Number Races

Number Races offer skills practice and number writing practice for young kids. But more than that, there is a real surprise in this game: some numbers are far better than others. Why? It feels intuitively wrong that the dice “like” one number more than another. This kind of surprise makes kids pay attention, and stew over the mystery of why something so unlikely would be true.

How to Play

Number Races is a game for 2-4 players. Each player chooses a color and takes turns picking numbers from 1 to 12. Each player chooses two numbers. Circle the numbers on the bottom row in your color to remember which ones you chose.

To play, each player takes turns rolling two dice. Find the **sum** of the numbers rolled, and write it in over one of the dotted numbers in the grid. This means you may write in your opponent’s number. Whoever’s number makes it to the top first wins!

The Launch

Take two volunteers from the class and demonstrate a few turns from the game. As you play, consider out loud what the best choice of number might be—don’t be afraid to use faulty reasoning, as in, “Maybe the biggest number (12) will come up the most... I wonder. Maybe it doesn’t matter which number I pick...”

Play until the students watching understand how to play. Then divide them into groups and let them play on their own.

The Wrap

This is an excellent game to discuss. Which numbers are rolled most? Why? Even if students don’t discuss it, they’ll still develop their strategies if they’re given enough of a chance to play over time.

This is a great game to use at a station once kids know how to play it.

Tips for the Classroom

1. Using foam dice or finding soft surfaces to roll the dice on can keep the classroom from becoming too noisy.
2. Make a rule that if a die falls off the desk, students must re-roll both dice.

