

The Big Idea:

Kids get moving and learn about volume in this family backyard race!

You Will Need:

- ★ Outdoor space to set up two 25 foot racetracks
- ★ A set of measuring cups
- \star Two plastic pitchers to place at the starting lines
- \star Two more pitchers, bowls, or buckets to place at the finish line
- ★ Water!

The Math Behind the Scenes:

Kids learn about measurement and volume, two subjects that are much easier to understand when they're experienced hands-on.

How it Works:

- 1. Set up two side-by-side raceways outside, about 25 feet long.
- 2. Use the measuring cups to fill two pitchers with the same amount of water. Before you start, talk about measurement. Ask:
 - ★ How much does each pitcher hold?
 - ★ How many cups will it take to fill the pitcher?
 - ★ How many half cups?
 - ★ How many quarter cups?
- 3. Place the full pitchers at the two starting lines.
- 4. Place an empty pitcher or bowl at each finish line.
- 5. Kids race to see who can transfer **all** of their water first! They can't go too fast, or the water will spill!
- 6. When someone finishes, you can measure how much water made it to the finish line what fraction made it all the way to the end?

BONUS: Have kids try the race a few times – each time with a different size measuring cup. Hypothesize how much longer it will take to complete the race with a full cup versus a half cup vs a quarter cup. Also guess which race will result in the most water in the finish line pitcher – e.g. will a larger or smaller cup spill more?