

# STEM

*starts now*

## Fizzing Rainbows

**Recommended Age:** 31–36 Months

**STEM concepts:** Science (chemistry, colors), Math (counting)

**Materials:** Plate, baking soda, vinegar, pipettes, food coloring

**What to do:** This experiment takes some setting up, but is really exciting to do! Your child can help you set up. Working together can help him work on his teamwork skills. First, spread a layer of baking soda onto the plate. This should only be about a fourth of an inch thick. Then, make a rainbow out of dots of food coloring. Then, pour one fourth of a cup of vinegar into a measuring cup. This is where the science happens! Give him a pipette and show him how to use it to pick up the vinegar. Squeeze the vinegar onto the food coloring rainbow. The vinegar will react to the baking soda and cause it to fizz colorfully.

**Language and Communication:** With each drop of vinegar, count out loud the number of drops used. As the plate begins to fizz, encourage her to say which colors she sees. The food coloring may mix together, creating new colors. At the end of the experiment, ask her what happened. Having her explain what she saw in her own words is a skill that will be used often once she goes to school.

**Expand the Activity:** To expand the activity, your child can put the food coloring dots onto the plate in various shapes. One plate could be a colored square and one could be a colored circle. Experiment with the amount of baking soda and vinegar used and see if anything changes.

