

# Amaze Your Brain *at Home!*

## EXPERIMENTS

BEST FOR  
18 months-  
4 years

### MAKE A RAINBOW

#### MATERIALS

- Glass of water
- Sheet of white paper
- The sun

#### INSTRUCTIONS

1. Fill the glass all the way to the top with water.
2. Put the glass of water on a table so that it is half on the table and half off the table (be careful that the glass doesn't fall!).
3. Make sure that the sun can shine through the water.
4. Place the piece of paper on the floor and adjust the paper until a rainbow forms.

#### WHAT'S HAPPENING?

Why does this happen? Sunlight is a mixture of all the rainbow colors; specifically, red, orange, yellow, green, blue, indigo, and violet. When light passes through water, it bends (refracts) into the colors seen in a rainbow. In nature, a rainbow is formed when sunlight is bent when it enters a droplet of water and bent again when it leaves the droplet.



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