

Recommended
age range
5+

RAINBOW REACTIONS

Create your very own Rainbow Reaction this spring! All you'll need are a few household items to become a chemist at home! Science can be used to create a work of art. Discover how simple chemicals react with one another to produce a pastel rainbow reaction!

MATERIALS



BAKING SODA



WHITE DISTILLED VINEGAR



LIQUID DISH SOAP



LIQUID WATERCOLORS
(OR FOOD COLORING)



MEASURING CUPS



MEASURING SPOONS



6 CLEAR CUPS
(GLASS OR PLASTIC)



SPOON



NEWSPAPER

MAKE A PREDICTION!

- What do you think will happen when you mix together your ingredients? Think about what you might see, hear, and smell. Do you think the colors will stay separate, or mix together? If you want, you can even write down or draw a picture of your prediction.

DIRECTIONS

1. To get started, find a space in your home that can get a little messy or set up a work space outdoors.
2. Next, place the six clear cups in a row next to each other.
3. Fill each cup with $\frac{1}{2}$ cup of vinegar.
4. Add 2 tablespoons of dish soap to each cup.
5. Stir with a spoon.
6. Now, add 1 tablespoon of liquid watercolor (different colors for each cup)
7. Stir again with a spoon until combined.
8. Measure out 3 tablespoons of baking soda per cup and add baking soda to each cup.
9. Gently swirl to combine.
10. Watch as the colorful foam builds and overflows from the cups!

AFTER THE EXPERIMENT, THINK DEEPER ABOUT THE REACTIONS YOU SAW! ASK QUESTIONS LIKE:

- What did you observe as you mixed together your ingredients? Describe what you heard, saw, and smelled.
- Was your prediction correct? Take a look at what you wrote or drew and talk about things that are the same as well as things that are different between your prediction and your results.
- Did anything in your experiment surprise you?
- What do you think you can change that might make your experiment turn out differently?