

SIMPLE SCIENCE

**Baking soda and vinegar activities are always a favorite!
The fizzing chemical reaction is exciting to watch and then do over
and over again!**

INSTRUCTIONS

STEP 1: Place a tray or bowl on the table to catch any spills. Wear safety goggles to protect your eyes.

STEP 2: Place a container or bowl on the tray.

STEP 3: Measure one tablespoon of baking soda using the measuring spoon and pour it into the container.

Tip: If you add a squirt of dish soap (optional) to the baking soda, your eruption will be bubblier!

STEP 4: Measure one-fourth cup of vinegar and slowly pour it into the container. Observe the reaction!

THE SCIENCE

An acid-base reaction occurs when baking soda (sodium bicarbonate, NaHCO_3) and vinegar (acetic acid, CH_3COOH) combine. The vinegar is an acid, and the baking soda is a base. When they are mixed, the acid and base react, resulting in the production of carbon dioxide gas (CO_2), water (H_2O), and a salt called sodium acetate (CH_3COONa). The release of carbon dioxide gas creates fizzing and bubbling, making this reaction visually exciting.

SUPPLIES

**Baking soda
Vinegar
Container or a bowl
Measuring spoons
Food coloring
and Dish soap
(optional)
Safety goggles
Tray or baking sheet**

BAKING SODA VINEGAR

This kids science activity is perfect for any busy family who wants to try a little science at home.

INSTRUCTIONS

STEP 1. To get started, place cookie cutters on whatever surface you have chosen.

STEP 2. Spoon baking soda into each cookie cutter.

STEP 3. Add food coloring.

STEP 4. Encourage your kids to suck up some vinegar with the eyedropper or baster and drop in each cookie cutter. Now stand back and watch the action!

SUPPLIES

Baking Soda
Vinegar
Food Coloring
Cookie Cutters
Tray
Eye Dropper
or Baster

THE SCIENCE

Why is the baking soda bubbling? The chemical reaction of course. Bubbling, fizzing carbon dioxide which creates a rainbow of colors.

When you mix the baking soda with the vinegar they react and form a gas called carbon dioxide which then produces the fizzing eruption you can see. This chemical reaction occurs because of an acid {the vinegar} mixing with a base {baking soda}. When the two combine the reaction takes place and the gas is created.

