

## Sparkly Volcano Instructions

### Materials:

- Vase/clear container
- Plastic tub
- Baking soda
- Vinegar
- Food coloring
- Glitter/Sequins/Tin foil shreds
- Measuring spoons/cups
- Paper towels



### Instructions:

- Put the vase inside the plastic tub
- Place 2-3 Tablespoons of baking soda in the bottom of the vase
- Add 6-7 drops of food coloring to the vase
- Add 1-2 teaspoons of glitter to the vase
- **Predict what will happen once you add the vinegar**
- Quickly pour in about  $\frac{1}{2}$  cup of vinegar to the vase. Watch for the sparkly explosion!
- Repeat the experiment (you do **not** need to add more baking soda to the vase, just vinegar. The baking soda should last you 2-3 “explosions”) – but allow the kids to change the variables – add salt, soap, etc. and see if that changes the reaction.
- **Predict how the new variable(s) will change the reaction prior to adding in the vinegar**

### How it works:

- The baking soda (sodium bicarbonate) is a base while the vinegar (acetic acid) is an acid. A chemical reaction between vinegar and baking soda creates a compound called carbonic acid which is very unstable, and instantly breaks apart into water and carbon dioxide. Carbon dioxide is the gas that creates the volcanoes fizzing, as it escapes the solution.
- Did you know Carbon dioxide is also the gas that is used to create soda?