



# DIY VOLCANO

## You will need:

- 10 ml (2 tsb) of dish soap
- 100 ml (approx. 1/2 cup) of cold water
- 400 ml (approx. 2 cups) of white vinegar
- A squirt of food coloring (not the whole bottle)
- Baking soda slurry (fill a cup about 1/2 with baking soda, then fill the rest of the way with water)
- Empty 2 L soda bottle
- Optional a funnel

## Procedure:

**NOTE:** This activity should be done outside due to the mess.

**Step 1:** In your soda bottle combine the vinegar, water, a squirt of food coloring and add the dish soap at the end (this prevents too many bubbles forming).

**Step 2:** Using your stirring stick, mix the baking soda mixture until it is all a liquid.

**Step 3: Lava time!** ... Pour the baking soda mixture into the soda bottle quickly (use a funnel to help if needed) and step back!



What happens if you have a different shape bottle? Or if you change the temperature of the vinegar?

## The Science Explained:

The vinegar and the baking soda are reacting with each other. That chemical reaction creates a new product called carbon dioxide. Carbon dioxide is the same type of gas that is used to produce fizzy drinks.

Volcanoes are usually found where the earth's crust meets and the magma under the crust finds a way out. Volcanoes are created over millions of years, and the lava takes many years to cool down. Did you know that depending on the cooling time of the lava, you have different types of rocks?

