

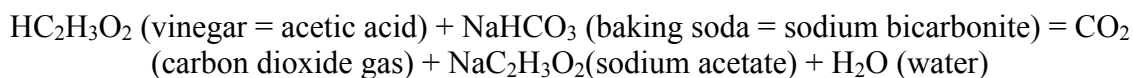
Volcano Craft

Make a mock volcano that erupts when you mix baking soda and vinegar.

This is a very messy project - especially at the end when the volcano erupts. Wear old clothes and work on a pile of newspapers (or even better, outdoors).

In a real volcano, molten rock from deep within the Earth erupts through a volcano (the molten rock is called magma when it is within the Earth and is called lava when it comes out of a volcano). In this project, a mock volcano will erupt with a bubbly, fizzy liquid that is created by a simple chemical reaction.

This project shows what happens when an acid (vinegar) and a base (baking soda) interact. Chemically, the acid and base neutralize each other, producing carbon dioxide gas as a by product. The exact reaction is:



Supplies:

- Old aluminium pie tin (or baking pan or paper plate)
- Lots of old newspaper or a deep sided tray
- Baking soda (about 3-4 tablespoons)
- Vinegar (about 1/2 cup)
- A few drops of liquid dishwashing detergent
- Small plastic bottle (like a small pop bottle)
- Modelling clay or paper mache volcano
- Funnel
- Measuring spoon and measuring cup
- Red food colouring
- Glitter (optional)



Put the clean, empty bottle on the aluminium pie plate (or baking pan or paper plate).

Using the modelling clay or



paper mache , make a volcano around the bottle. Leave the area around the top of the bottle open and don't get any clay inside the bottle.

You can decorate the volcano with little twigs, lichens (that look like tiny trees), etc.



Using the funnel (make sure it's dry), put 3 to 4 tablespoons of baking soda into the bottle. Then add a few drops of liquid dishwashing detergent and about a half cup of water. Optional: add a little bit of glitter (about half a teaspoon).



Put a few drops of red food colouring into about one-half of a cup of vinegar.



The Eruption: Using the funnel, pour the vinegar mixture into the bottle (then quickly remove the funnel).

Your volcano will erupt immediately! When the vinegar reacts with the baking soda, carbon dioxide gas is formed and the bubbles push the "lava" out the "volcano."

Be prepared for a mess!