

Chemical Volcano

You will need:

For the volcano shape:

- 3 cups flour
- 1 cup water
- 1 cup salt
- 2 tablespoons of cooking oil

For the lava:

- Warm water
- Plastic empty fizzy drink bottle 0.5L
- Washing up liquid
- Food colouring: orange or red
- White vinegar
- Baking dish, pan, tray etc
- 2 tablespoons of baking soda

Let's make it!

You can make an eruption without making a 'volcano', but it's easy to model and looks much cooler. Making the dough: mix together 3 cups flour, 1 cup salt, 1 cup water and 2 tablespoons of cooking oil. Work the dough with your hands or stir it with a spoon until the mixture is smooth. If you like, you can add a few drops of food colouring to the dough to make it volcano-coloured. Set the drinks bottle in the centre of a pan or deep dish. Press the dough around the bottle and shape it so that you get a 'volcano'. Be careful not to plug up the opening of the bottle! Now the fun part: fill the empty drinks bottle most of the way full of hot tap water (about 0.4L), add some food colouring and a good squirt of washing up soap. Next add some baking soda (2 tablespoons). Ready? Now pour some vinegar into the bottle! BRAAA! You can make the volcano erupt again by adding more baking soda. Pour in more vinegar to trigger the reaction.

How?

The red lava is the result of a chemical reaction between the baking soda and vinegar. In this reaction, carbon dioxide gas is produced, which is also present in real volcanoes. As the carbon dioxide gas is produced, pressure builds up inside the plastic bottle, until the gas bubbles (thanks to the detergent) shoot out of the 'volcano'.

