

An erupting volcano!

Make a live volcano using the chemical reaction between two common kitchen products.

In the classroom

What you need

A piece of board (a clay board is fine), a small plastic pop bottle, Plasticine or clay, bicarbonate of soda, some red food colouring and some vinegar.

What you do

What do volcanoes do?

Put the bottle in the middle of the board.

Build around it with Plasticine or clay so that the bottle mouth becomes the mouth of the volcano.

Put a spoonful of bicarbonate of soda in the bottle.

Add a few drops of red food colour – now the volcano is ready for action.

Cover the table in case of spills as the red food colour can spread and stain.

Keeping everyone at a safe distance and pour a little vinegar into the bottle.

What happens

The result will be an eruption of foaming red magma that pours satisfactorily from the bottle top.

Background Information

Why it happens

Vinegar – a weak acid – reacts with the bicarbonate of soda to produce carbon dioxide gas. This gas quickly fills the bottle, bubbling up and pushing the mixture out of the bottle top. The red food colour simply makes it look more like lava.

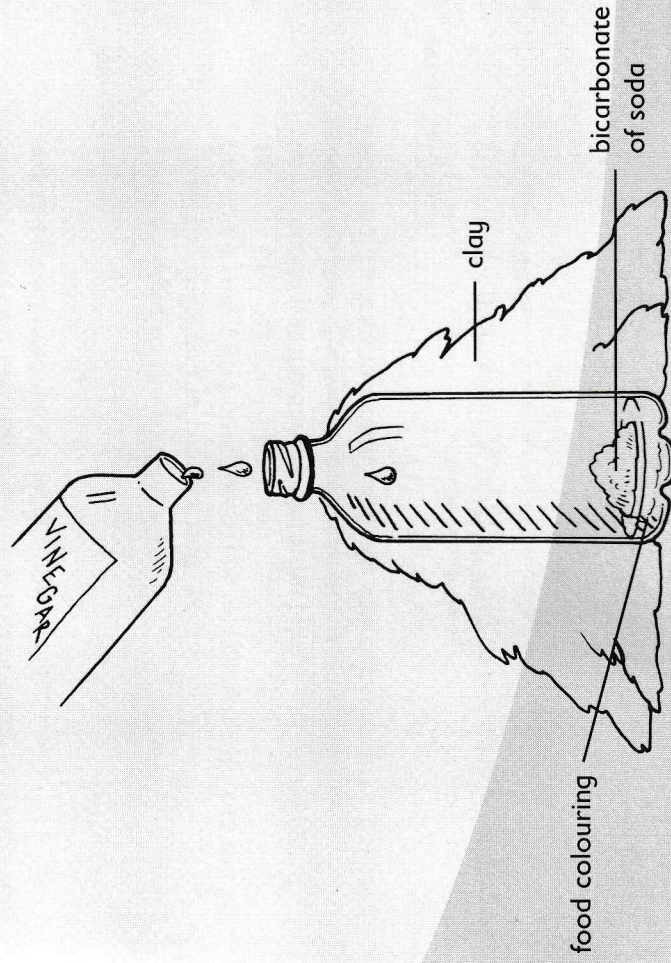
By the way

Make sure the bottle used is fairly small or the eruption will not occur.

Remind the children about lava – the igneous rock that emerges from inside the Earth.



Be careful that children do not inhale the bicarbonate of soda, or rub it in their eyes.



Curriculum links

KS2 Sc3 2f: QCA SoW 5D Changing state, 6D Reversible and irreversible changes
Envtl St/Science/E&S/CM/Level E/Target 1