Erupting Volcano

What you’ll need:
• Plastic drinks bottle
• Washing up liquid
• Food colouring
• Vinegar
• 2 tbsp bicarbonate of soda

How you do it:
1. Stand the drinks bottle in a baking pan. Fill the bottle most of the way full with warm water and a bit of red food colouring.
2. Add 6 drops of washing up liquid to the bottle contents. The washing up liquid helps trap the bubbles produced by the reaction so you get better lava.
3. Add 2 tbsp bicarbonate of soda to the liquid.
4. Slowly pour vinegar into the bottle.
5. Watch out – eruption time!

How does it work?
The cold red lava is the result of a chemical reaction between the bicarbonate of soda and vinegar. 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 washing up liquid) erupt out of the ‘volcano’.

To make a real volcano create a salt dough by mixing 6 cups of flour, 2 cups of salt, 4 tbsp cooking oil and 2 cups of water in a large bowl until smooth and firm. Mould around the drinks bottle into a volcano shape. Be careful not to drop any dough in the drinks bottle or cover the hole.

As with all science experiments, make sure you have a responsible person supervise you at all times. And remember to have fun!