



KITCHEN SCIENCE

Chemical Reactions

FANTASTIC FIZZY FUN VOLCANO

You will need

- A clear plastic cup or bottle (one with a narrow neck will be most effective)
- Bicarbonate of soda 1/4 cup
- Food colouring (optional)
- White vinegar about 1/2 cup (more for a continued eruption)
- A tray to catch the explosion (or do it outside)
- Dropper or pipette (to add the vinegar)

Instructions

1. Place the cup or bottle onto the tray to catch the overflowing mixture.
2. Put the bicarbonate of soda into the container. Add a few drops of food colouring if you wish.
3. Add vinegar to the bicarbonate of soda and watch what happens. The effect is immediate!
4. Watch the reaction take place like an erupting volcano! What can you hear?

Top tip: Keep adding more bicarbonate of soda and vinegar for continued eruptions.

What's happening?

Bicarbonate of soda made up of chemicals called sodium, hydrogen, carbon and oxygen which are all mixed together. When these compounds come into contact with the acid in vinegar there is a chemical reaction. The carbon and oxygen break away and make a gas called carbon dioxide.

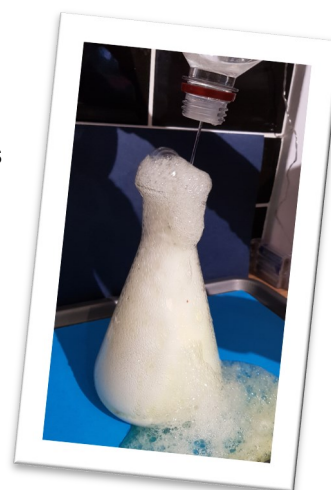
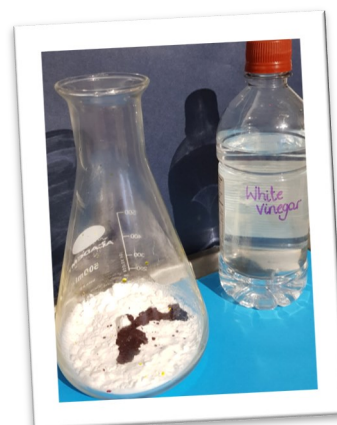
Can you hear the fizzing sound? The is the tiny bubbles of carbon dioxide popping.

Now try this

Add two different primary colours of food colouring to the bicarbonate of soda and predict what might happen to the colour of the eruption.

For lots of mini eruptions you could use plastic bottle tops as containers. Spread them out onto the tray and repeat the steps above with smaller amounts of bicarbonate of soda and vinegar. Use a dropper or a pipette to add smaller quantities of vinegar if you have one.

Adult Supervision
Required!



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