

Blowing up Balloons!

Here's a fantastic kitchen chemistry experiment that's loads of fun and educational too. Chances are you can grab everything you need from around your home, so let's get started!

What do I need:

- A balloon
- A teaspoon (maybe a funnel!)
- Small plastic bottle (around 500ml)
- White vinegar
- Bicarbonate of soda or baking soda

How do I do it?

STEP 1 - Blow up the balloon and then let the air out a couple of times to 'warm it up'. Unless you like living on the edge, that is!

STEP 2 - Pour the white vinegar into the bottle until you've covered the bottom with around a 5cm layer.

STEP 3 - Half fill the balloon with Bicarbonate of soda and then carefully stretch the balloon over the top of the bottle. Keep the bicarbonate of soda in the bottom of the balloon so that it doesn't start to mix just yet (as shown in the picture!)

STEP 4 - It's time for blast off! Lift the balloon up so that the bicarbonate of soda drops down and mixes with the vinegar. Whoosh, watch the balloon 'magically' inflate! Listen to it fizz!

What's going on?

When the bicarbonate of soda falls and mixes with the vinegar you can see (and hear!) it bubbling right away! This is because you've just made your very own chemical reaction.

This is the classic "acid, base" reaction. When the acid (the vinegar) reacts with the base (which is the bicarbonate of soda) bubbles of carbon dioxide are given off, which fill up your balloon, in spectacular fashion!

More Fun Please - Experiment like a real scientist!

- What happens when you use more or less of the bicarbonate of soda?
- What will happen if you fill the bottle almost to the top with vinegar?
- Be sure to make your predictions then get experimenting and find out for sure!

