



This is one of the most fun, simple and inexpensive science experiments you can do. It also encourages budding scientists to experiment with combing the ingredients in different ways and in different amounts.

You will need

Baking soda (bicarbonate of soda)
White vinegar
Liquid food colouring
A cup or a glass



Method

- Half fill the cup with vinegar. Add a few drops of food colouring of your choice and mix through. Quickly drop in a heaped teaspoon of baking soda. The baking soda and the vinegar will react, and a colourful foam will bubble and froth up out of the cup. Make sure you are working somewhere it's ok to make a mess.
- Experiment with different amounts of vinegar and baking soda to make larger reactions. Experiment with different amounts of colour and colour combinations. Never do this experiment in a closed container as the build-up of gas could cause it to explode.

The science

Baking soda and vinegar react with each other because they exchange atoms. In this reaction, baking soda acts as a base, and takes a proton from vinegar, which is an acid. The reaction releases gas because when the baking soda receives the proton, it transforms into water and carbon dioxide. **scienceline.ucsb.edu**