Activity information

Activity title	Lemon volcano
Description	In this activity, participants will perform a simple acid + alkali reaction, making a lemon volcano

Kit list

You will need:

- A lemon
- Bicarbonate of soda
- Plate
- Knife
- Spoon
- Food colouring (optional)
- Washing up liquid
- Bowl

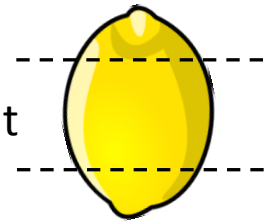
The Science:

Lemon juice is very **acidic** because it contains **citric acid** which gives it that sour taste. Citric acid is found in lots of **fruit** and **fizzy drinks**, too much of which can be bad for your teeth.

When you mix an **acid** like citric acid with an **alkali**, there is a chemical reaction. **Bicarbonate of soda** is an alkali. When it's added to the lemon, it combines with citric acid and releases bubbles of carbon dioxide gas. The bubbles mix with the washing up liquid, creating a fizzy, frothy **lemon volcano**!

How to:

1. Sit the lemon on the plate. Ask an adult to cut a bit off both ends of the lemon so that it sits flat and upright.



2. Sit the lemon upright in the bowl. Use the spoon to mash up in the inside of the lemon.

3. Add a few drops of food colouring and a squeeze of washing up liquid into the lemon.

4. Add a spoonful of bicarbonate of soda to the lemon.

5. Use the spoon to mix it a little. Watch what happens!

Glasgow Science Festival Risk Assessment Form

Activity Title	Lemon Volcano	**Date of Activity**	

Potential Hazard:	**Who's at risk?**	**Risk: High, Medium, Low**	**Measures to prevent hazard**	**Person to Action Measure**	**Date Completed**
Cutting with knife	Children	Low	Lemon should be cut by an adult, using a hard plastic plate.		
Lemon juice in eye	Everybody	Low	Wash hands after use; avoid contact with eyes. Mild irritation may occur - if condition worsens, flush with water.		