

11-16 Science at home

Lemon Volcano

MATERIALS:

- Lemon half
- Paddle pop sticks
- Food colouring
- Dish soap
- Baking soda
- Bowl

METHOD:

1. Place your lemon half in a bowl and poke it with a paddle pop stick to make it juicy
2. Add a few drops of food colouring
3. Add a dribble of dish soap
4. Sprinkle the top of the lemon with baking soda
5. Poke your lemon with a paddle pop stick to make it ERUPT!



THE SCIENCE:

The baking soda (sodium bicarbonate) is a base while the lemon juice (acetic acid) is an acid. When they react together they form carbonic acid which is very unstable, it instantly breaks apart into water and carbon dioxide, which creates all the fizzing as it escapes the solution.

The dish soap helps capture the gas so we can see it as bubbles during the reaction.

Here is the chemical reaction taking place in our lemon volcano:

