

Erupting Apple Experiment

Supplies Needed:

- apple
- baking soda
- vinegar
- container to catch the fizz
- knife to carve out hole (*for adults to do!*)

Setting Up the Experiment:

1. Take the core out of the apple (Adults)
2. Fill the apple with baking soda.
3. Place apple in the middle of a container.
4. Pour the vinegar straight into the apple
5. Observe what happens!
6. Have a chat about what is happening...for example...



The fizzy bubbling action is actually a chemical reaction from the two materials (baking soda and vinegar) mixing.

You can explain that a gas is released called carbon dioxide.

Key Word(s): chemical reaction, reactants (what is reacting in the chemical reaction), products (what is made in the chemical reaction)

How it works:

Baking soda is the common name for sodium bicarbonate. It is a weak base which means when added to water it will create an alkali solution. Sodium bicarbonate contains the elements sodium, hydrogen, carbon and oxygen.

Vinegar contains ethanoic acid (also known as acetic acid). Ethanoic acid contains the elements carbon, hydrogen and oxygen.

When you add these together a chemical reaction occurs and water, a salt (sodium acetate) and carbon dioxide gas is formed.

It is the release of this carbon dioxide gas through the liquid that causes the fizzing bubbling action!

CfE Links: Investigative & Inquiry Skills and SCN 2-19a



On-line Links:

<https://www.natgeokids.com/uk/discover/geography/physical-geography/volcano-facts/> has lots of facts about real volcanos.

<https://littlebinsforlittlehands.com/chemistry-activities-experiments-kids/> has more chemistry experiments you can try at home.

The Royal Institution Experimental (<http://www.rigb.org/families/experimental/about>) has lots of science videos to help you bring science home with simple and inexpensive experiments.

The Dad Lab on YouTube (<https://www.youtube.com/channel/UCC-hy0u9-oKINdMKHBudcQ>) also has lots of simple experiments to try at home with videos showing you how to do them.

<https://www.britishscienceweek.org/> has activity packs and citizen science projects with new ones each year for the annual British Science week in March.