

# #ExperimentsAtHome



Experiment shared by: Leonie Briggs, Science Teacher at Darton Academy and STEM Ambassador

## VOLCANO

### Make and erupt a volcano

#### You will need:

- Baking powder – bicarbonate of soda
- Cardboard
- Food colouring – ideally red and yellow.
- Mixing bowl
- Newspaper
- Paintbrush
- Paints
- Plastic bottle/tube
- PVA glue
- Vinegar
- Washing up liquid



#### Instructions:

1. Glue your plastic bottle or tube on to the cardboard base.
2. Mix  $\frac{3}{4}$  PVA glue to  $\frac{1}{4}$  water in a bowl.
3. Add rolled up pieces of paper to the glue and water mix.
4. Add these to form your volcano by starting at the base of the bottle/tube working up and out.
5. Leave your volcano to dry overnight.
6. Once the volcano is dry it's time to start painting! Ideally use volcano based colours e.g. brown, black for the base coat. Leave the base coat to dry.
7. Once the base coat of the volcano is dry it's time to add some detail, for example, using orange paint to look like lava following down your volcano. Leave to dry overnight.



### Instructions continued:

1. You are now ready to erupt your volcano! For this you will need: vinegar, bicarbonate of soda (baking powder), washing up liquid and food colouring.
2. Add bicarbonate of soda (baking powder) to the plastic bottle/tube located into the volcano – pour this down into the tube – a spoonful or two will do it depending on the size of your bottle.
3. Add a couple of drops of your food colouring – ideally red and yellow.
4. Add washing up liquid – a squirt should work well!
5. Add your vinegar.
6. Enjoy and watch!



### How it works!

A chemical reaction between vinegar and bicarbonate of soda creates a gas called carbon dioxide. The gas starts to spread out, because there is not enough room in the plastic bottle or tube at the centre of the volcano it leaves through the top, very quickly, causing the eruption!

### Share your results!

We'd love to see photos and videos of you doing the experiment. Please share on Twitter with hashtag #ExperimentsAtHome and tag in @STEM\_HUBNMSEY

Thank you!

### Other experiments!

Leonie also does lots of wonderful home science experiments on her twitter account – please give her a follow [@MrsBriggsDA](https://twitter.com/MrsBriggsDA)

PLEASE ASK FOR ADULT PERMISSION AND/OR SUPERVISION WHEN REQUIRED.



We hope you have fun!