

WARNING!



This experiment uses a knife. Ask an adult to help you carve the pumpkin. Make a pul

Add some "yuck" to your Halloween pumpkin and have it spew out some bright, foaming liquid.

What you need

- Pumpkin
- Knife
- Spoon
- Non-permanent marker
- Scissors
- Paper cup

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- Warm water
- Green food colouring (optional)
- Washing-up liquid
- 5tbsp bicarbonate of soda (also called baking soda)
- Tray, newspaper or plastic sheeting
- 100ml vinegar
- Measuring jug





Things to make and do





Ask an adult to help remove the stalk and cut a lid in the pumpkin. Scoop out the innards using a spoon.



Use a non-permanent marker to draw a scary face on your pumpkin. Carve it with a knife.



Use scissors to trim a paper cup to size, so that it fits snugly inside the pumpkin.



Remove the cup and half-fill it with warm water.



If you're using it, put a little green food colouring into the cup.



Next, pour in a small quantity of washing-up liquid.



Add 5tbsp of bicarbonate of soda to the cup and mix. The mixture may start frothing.



Pop the cup back inside the pumpkin.



Place the pumpkin on a tray, some newspaper or plastic sheeting to protect surfaces.



Measure 100ml of vinegar into a jug. Add it to the cup, put the pumpkin lid back on and stand back.

Pumpkin inspiration



How does it work?

You have created a chemical reaction between opposite kinds of substances called acids and bases. Vinegar is an acid; bicarbonate of soda is a base. When mixed together, acids and bases react. With bicarbonate of soda, the product of the chemical reaction then breaks down, releasing carbon dioxide gas. This is why bicarbonate of soda is used in baking, because it helps cakes to rise. The escaping gas foams up the washing-up liquid. It also slows down the chemical reaction, making it last a bit longer.



This reaction also makes model volcanoes erupt.

