Things to make and do

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Use science and some simple kitchen ingredients to create self-inflating Halloween decorations.

What you need

- Halloween balloons (we used recycled balloons)
- 3 tsp bicarbonate of soda
- Around 150ml vinegar
- Funnel
- Spoon

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• Small empty water bottle

How does it work?

This experiment relies on a chemical reaction between an acid and a base. A base is a substance that reacts with an acids to neutralise it. Here, vinegar (also known as ethanoic acid) is the acid and bicarbonate of soda is the base. When the two are mixed, the resulting chemical reaction releases carbon dioxide (CO_2) gas. As CO_2 fills the bottle it begins to inflate the balloon, creating a spooky Halloween effect.





If you can't find Halloween-themed balloons, use regular balloons and use a black felt-tip pen to draw spooky faces On them.



Blow up your balloon slightly and poke the end of the funnel into it. Then, carefully spoon the bicarbonate down the funnel and into the balloon.



2 Put the balloon to one side. Pop the funnel into the top of the water bottle and pour the vinegar into the bottle until it is roughly half-full.



Fit the balloon onto the bottle, while squeezing the neck between your thumb and forefinger. Then release the bicarbonate into the vinegar.

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HALLOWEEN BALLOONS SARAH MCCLELLAND CREATOR OF LITTLEBINSFORLITTLEHANDS.COM - REX SHUTTERSTOC