

Science – Balloom Powered Water Pump

Make your own drinks dispenser to keep yourself hydrated while you're out in the sunshine and learn about air pressure!

WARNING – adult supervision recommended!

Balloon Powered Water Pump

You will need:

- Plastic bottle
- Scissors
- Straw
- Blu-tack/plasticine/glue
- Balloon
- Peg
- Glass/bowl

1. Cut a hole about half way up the plastic bottle (heating scissors with a candle and poking the end through the plastic can help with this but **PLEASE ASK AN ADULT!**)
2. Push the straw through the hole then seal with blu-tack, plasticine or glue.
3. Fill the bottle about two thirds full with water.
4. Blow up a balloon, twist and secure it with a peg and then carefully attach it to the top of the bottle.
5. When you're ready, remove the peg and watch the water shoot out into the glass or bowl. Use the peg like a tap!



THE SCIENCE

This works because of changes in air pressure. When the balloon is pegged, air pushes down on the water in the bottle and the water already in the straw equally so there is no movement. When the peg is removed, air is forced into the bottle from the balloon, increasing the air pressure pushing down on the water, causing it to rise through the straw.

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