



HANDS-ON EXPERIMENTS

BAROMETER



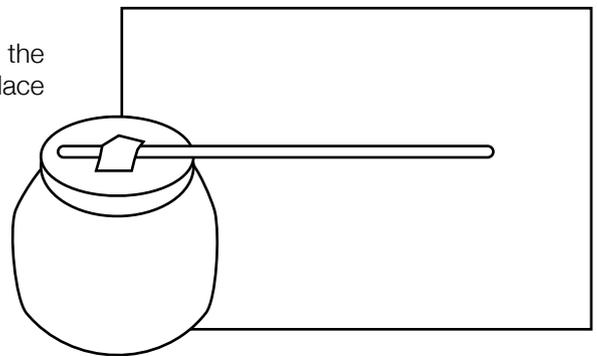
A barometer measures air pressure - it's an important part of any weather station as the changes between high and low pressure have a huge impact on the type of weather we experience. Not least because rainfall happens where high and low pressure areas meet.

Your simple barometer can actually give readings about how the weather will change - it can even predict rain!

Procedure

What you'll need: A balloon, a small jar, beaker or empty tin can, an elastic band, a straw, scissors and sticky tape.

- Stretch the balloon by inflating it and then letting the air out again. Then cut the balloon in half and throw away the part with the neck.
- Stretch the balloon over the mouth of the jar very tightly so that the surface of the rubber is flat and under tension. Hold the balloon in place using the elastic band. Make sure that there are no air gaps.
- Now attach the straw to the jar - this is the indicator for the barometer. The straw should sit almost across the width of the rubber lid on one side of the jar and hang off the other side. Hold it in place with a piece of sticky tape over the centre of the rubber.
- Attach a piece of white card or thick paper to the back of the jar, making sure that it extends as far as the straw. Mark the current position of the straw on the card and note down the date and weather conditions next to it.



Investigation

- Take readings several times a day and mark them onto the card. You could try marking on a scale to the card so that you can read off a value.
- Can you find a connection between the type of weather and the barometer reading? Can you predict weather movements with this?
- Check the official pressure data and use it to calibrate your barometer.

VIDEOS FOR THIS RESOURCE AT:

INTRODUCTION:



Clickable Link:

<https://youtu.be/FTMonP1Goll>

CONCLUSION:



Clickable Link:

<https://youtu.be/3g2GC7uJmfA>

