Zedua Experiments

Title: Make Your Own Barometer

A barometer is a scientific instrument used in meteorology to measure atmospheric pressure.

What is atmospheric pressure?

The pressure at any location on the earth, caused by the weight of the column of air above it.

Materials Required:

1. A balloon
2. Scissors
3. A jar
4. A rubber band
5. Tape
6. A straw
7. A piece of card
8. A marker (felt pen)

Procedure:

1. Cut off the top of the balloon (the part which you blow into).
2. Stretch the balloon over the top of the jar and secure it with a rubber band.
3. Place the straw across the top of the jar so that one third of the straw is hanging over the edge of the jar. Tape the straw to the balloon.
4. Draw three lines on the piece of cardboard that are about half a centimetre apart from each other. Label these lines as high, moderate and low.
5. Tape the card against the back of the jar so that the straw points to moderate label.
6. Place your barometer on a flat surface somewhere inside.

What's happening?

When there is low air pressure the balloon will expand out and the straw will point down. This is because the air inside the balloon now has relatively more

air pressure compared to the air outside. As a result it pushes the balloon out.

When there is high air pressure the air on the outside will push the balloon into the jar and the straw will point upwards. The air inside the balloon now has relatively less pressure. As a result this pushes the balloon inwards.

Source: pintrest