## Week commencing Monday 8th June 2020

#### LO: To predict the change in the weather using a barometer

# **QUESTION:** How can you predict the weather using a barometer?

What is a barometer? Barometers are used by weather forecasters to help predict the weather. These devices are used to measure the atmospheric pressure of a place. A barometer usually contains a small vacuum chamber that will expand and contract with the changing air pressure.







Follow these links to learn a little more about air pressure:

Gravity and air pressure: <a href="https://www.youtube.com/watch?v=c86xKDcy-TQ">https://www.youtube.com/watch?v=c86xKDcy-TQ</a>

Measuring air pressure: <a href="https://www.youtube.com/watch?v=pL6BthjvTZ4">https://www.youtube.com/watch?v=pL6BthjvTZ4</a>

Here are some examples of what they look like.

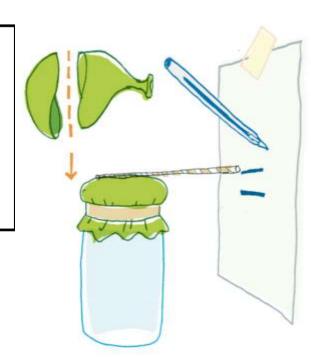
**Task:** You are going to conduct an experiment <u>throughout the week</u> to record the atmospheric pressure and predict what the weather will be. Look out to see if you can identify a pattern.

#### Instructions:

- 1. Cut the bottom half off the balloon.
- 2. Pull the top half of the balloon tight over the jam jar.
- 3. Use the elastic band to keep the balloon tight over the jar.
- 4. Fix the straw to the centre of the balloon skin using a piece of sticky tape.
- 5. Place the paper so that it is lined up against the straw. Draw a line at this position. (this is your starting point)
- 6. Above the line write the word "high" and below the line write "low".
- 7. Note down the pressures each day to see if you can notice a pattern between your air pressure readings and the weather outside. You can make a mark above or below your starting point and write the day to remind you of the changes.

#### You will need:

- A glass jar or similar
- A balloon
- A rubber band
- Scissors
- A straw
- Sticky tape
- Paper
- Pen



#### **Predictions:**

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Prediction							
(Looking at							
the pressure							
reading,							
predict how							
you think the							
weather will							
be)							

### Results:

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Air pressure reading							
(High or low)							
Weather outside							
(Description of the weather outside)							

# **Evaluation:**

Did your predictions match your results?

Where you able to identify a pattern?

What did you learn from this experiment?