

How to make a weather station

You will need...

- Scissors
- Marker pen
- Cardboard
- Pencil with an eraser
- Long drawing pin
- Drinking straw
- Plasticine/modelling clay/blu-tack or similar
- An empty plastic bottle (2 litre fizzy drink bottle would be ideal)
- Jelly (3 or 4 cubes made up as directed)
- Sticky tape (not essential)
- Stick/cane
- Carrier bag cut into strips/ribbon
- Compass (you could use Google Earth to work out the orientation if you don't have a compass)
- Thermometer if available

Remember to get an adult to help you with any steps involving sharp scissors and pins!

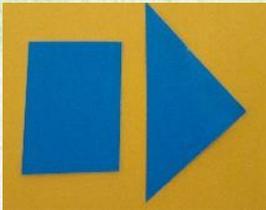
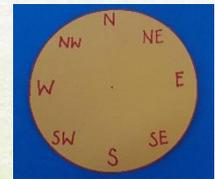
Wind Speed Indicator

1. Cut a carrier bag or ribbon in to strips
2. Tie the strips on to a stick or cane



Wind Vane

1. Cut a circle out of cardboard, mark it with compass points and cut a small hole in the centre.



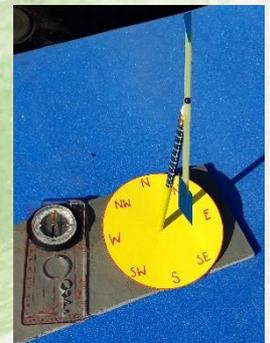
2. Cut out a triangle and rectangle from cardboard.

3. Cut a small slit in each end of the straw and slot the arrow head and tail in to these.



4. Push the pencil through the cardboard circle and into a lump of modelling clay/blu-tack/plasticine.

5. Push a drawing pin through the centre of the straw and into the top of the eraser. You may need to wiggle this about a bit to make the pin hole large enough for the straw to spin.



6. Use a compass to work out which way is north and then position your cardboard circle to match this.

Rain Gauge



1. Cut the plastic bottle 1/3 of the way down.

2. Make up your jelly and pour it into the bottom of the bottle. This is to make sure the bottom is flat and level.



3. Take the top 1/3 of the bottle, turn it upside down and place it inside the bottom part to make a funnel. Place and put in fridge until jelly is set.



4. On the side of the bottle draw a scale in millimetres. You can draw this straight on to the bottle or on a piece of tape then stick it on.

5. Don't forget to empty your rain gauge after you have recorded your data each day.



Collecting and Recording Data

You will find a data record sheet on the next page, although you might decide to create your own. You could add more detail such as the percentage of cloud cover or types of clouds. Instead of writing your data down, you could take audio or visual recordings of your findings.

- ✓ Try to collect your data at the same time of day each time. You can collect your data daily or weekly. You might even want to record data several times a day to see if things change.
- ✓ Include basic observations such as a description of the weather as well as data from your instruments.
- ✓ Try comparing your data to a professional forecast for your local area, are they similar or different? If they are different, try to work out why.
- ✓ Use your skills to estimate what you expect to find before you take a reading.
- ✓ Once you have several sets of data, try putting your results into a graph. Can you spot any trends over time? Do these trends fit with your expectations of the changing seasons?

Remember to share your creations and findings with us!

@theparkstrust



