

Make a Weather Station

Weather stations enable us to detect and record changes in the daily weather. To do this, you will need to create three items to be able to record rainfall and the wind speed and direction.

Collecting your Data:

Use the data recording sheet in this pack to collect your findings, or you might want to create your own. You could even add more detail such as the percentage of cloud cover or types of clouds.

Instead of writing your data down, you could take photos or record voice messages.

Tips and Tricks:

Try comparing your findings to an official forecast for your local area. Are they similar or different? If they are different, try to work out why.

Try to collect your data at the same time of day each time. You can collect your data every day or week, or even twice a day if you want to see how often things change.

Include data from your weather station as well as basic information such as what the weather is like.

Use your skills to work out what you think will happen (this is called an estimate) before you take a reading.

Once you have a few days/weeks worth of information, you could try making a graph.

Can you spot any trends over time? Do these trends fit with what you thought would happen through the year?

Create a Wind Vane

What you'll need:



Cardboard



Scissors



Plasticine/modelling clay/blu-tack or similar



Drinking Straw



Drawing pin



Pencil with eraser

How to make your Wind Vane:

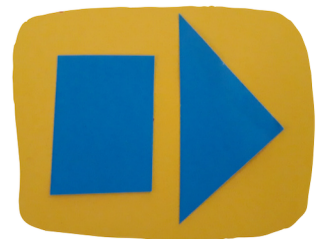
Step 1

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



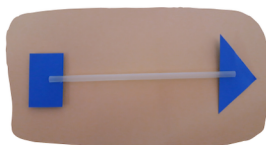
Step 2

Cut out a triangle and rectangle from cardboard



Step 3

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



Step 4

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



Step 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



Step 6

Use a compass to work out which way is north and then position your cardboard circle to match this. The straw should now spin to show the direction of the wind



Create a Wind Speed Indicator

What you'll need:



Carrier bag to cut into strips or ribbon



Long stick or cane

How to make your Wind Speed Indicator:

Step 1

Cut the carrier bag into strips



Step 2

Tie the strips onto the stick/cane



Step 3

When it is windy, the strips will be blown showing the wind speed



Did you know?

Someone who collects and studies data on the weather is called a 'Meteorologist'

Create a Rain Gauge:

What you'll need:



A 2 litre plastic bottle



Jelly (3 or 4 cubes)



Marker pen

How to make your Rain Gauge:

Step 1

Cut the plastic bottle 1/3 of the way down



Step 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



Step 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 in fridge until jelly is set



Step 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



Step 5

Now you can measure rainfall using the scale on the bottle. Don't forget to empty your rain gauge after you have recorded your data each day!

