#LifeGoesONline

Bringing Life Science Centre to you!



SCIENCE FOR ALL

How to make a Weather Station-Wind meter

What is a wind meter?

A wind meter, or an anemometer, is used for measuring wind speed (in knots) and wind direction.

Introduction:

Happy Earth Day! This year's theme is Climate Action, which means looking at changes we can all make to help our planet. We want you to take action by joining a worldwide network of scientists! You don't need a lab: you can do this from home, right now, by building a weather station with things you may have around the house.



You will need:

- Stick (the longer the better).
- Thin string or cotton.
- 5 materials of different weights e.g. Tissue paper, paper, foil, card, plastic.
- Scissors.
- Tape.

What to do:

STEP 1

Choose 5 different materials (we used tissue paper, paper, foil, thin card and cardboard). Cut them into 4cm x 7cm rectangles.

STEP 2

Cut five 20cm lengths of thin string or cotton.

STEP 3

Knot the string onto the stick. Try to space it out as much as you can. You might want to add some tape to secure it. Once they are stuck, check that all of the pieces of string are the same length. You may need to trim some.

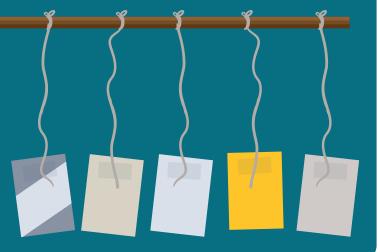


STEP 4

Tape a different material to each piece of string.

STEP 5

Place your completed wind meter outside in your garden or yard. You could poke it into some soil, or attach it to a fence so that it stands up, or you can hold it up as high as you can!



Once you have made your wind meter, watch the different materials.

- Which materials move in a light breeze?
- Which materials move in a strong wind?
- What direction are the materials being blown in? Could you use a compass to find out the direction? (most smartphones will have one)

THINGS TO TRY

- Is the wind speed the same everywhere in your garden?
- Where is it the fastest?
 - Up high?
 - Down low?
 - Close to a building?
 - · In the open?
 - In an alley?

Now that you have seen which materials move in your garden, why not head to the Met Office WOW website wow.metoffice.gov.uk, and find out the wind speed near where you live, in knots! Could you use this information to work out what speed is needed to move each material?

We are stuck at home, but #LifeGoesONline! Check out other activities to try at home on our social media channels @scienceatlife and send us a message if there's anything you want to see us cover!

