

MEASURE THE WIND SPEED

Check the wind speed with this quick and easy construction activity

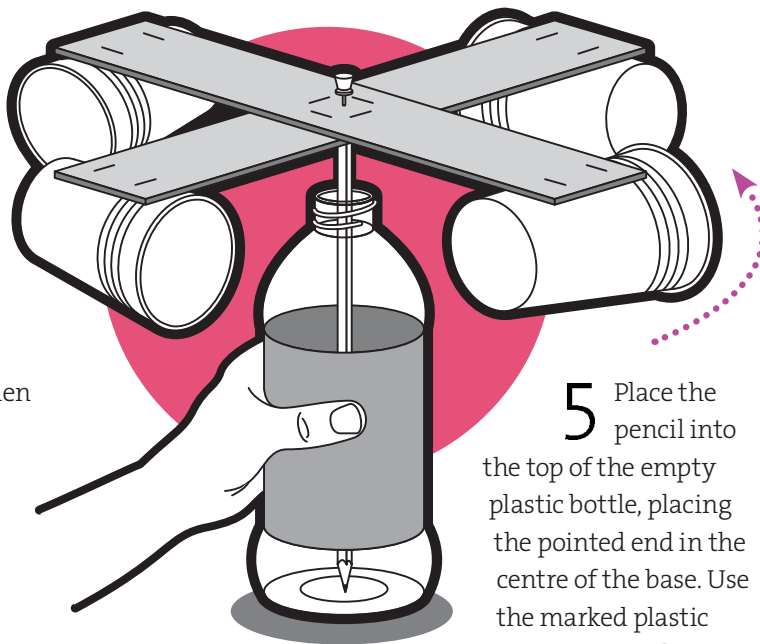
SUITABLE FOR CUBS

1 Ask your Cubs to cut the cardboard into two identical strips – each about one inch wide and seven inches long. Then staple them together.

2 Staple a plastic cup to both ends of each strip. Place them sideways-on and facing in opposite directions (refer to diagram). Mark one of the cups with a bold cross or dot with the marker pen.

3 Cross the strips of cardboard at right angles, ensuring the cups are all facing in the same direction.

4 Put a drawing pin through the centre of the cardboard cross and push this into the eraser on the end of the pencil. Gently turn the cross to check that it spins freely.



5 Place the pencil into the top of the empty plastic bottle, placing the pointed end in the centre of the base. Use the marked plastic cups to count the

rotations and then set some outdoor tasks.

Task one

Try to find the windiest area and record the number of rotations in 60 seconds. Then try to find the least windy area and compare results.

Task two

Send the Cubs outside and challenge them to map the wind speed around a structure by comparing the different results of rotations per second on different sides of a building's corner.

TIME NEEDED
30-45 minutes

EQUIPMENT NEEDED

- Plastic cups
- Stiff cardboard
- Stapler
- Empty plastic bottle (less than 300ml)
- Drawing pin
- Pencil with a rubber at the end
- Marker pen

THIS ACTIVITY LINKS WITH THE FOLLOWING BADGES



Scientist Activity Badge



Environmental Conservation Activity Badge

OUTCOMES

This activity will test your Cubs engineering skills and introduce the idea of wind speed and how it can be measured. When comparing results, your section will see how windspeed changes because of the landscape around them. Get your Cubs thinking about wind energy too and work on your Environmental Conservation Activity Badges.

OTHER SECTIONS FOR SCOUTS

Challenge your Scouts to create several anemometers using different materials, different-sized cups and larger bottles with a knitting needle in place of the pencil to see how this affects the results and data they collect.