

Chase bubbles to estimate wind direction

You will need a bubbles tub (with wand) and a compass. Choose an area of open ground, a safe distance from roads, etc. Remember: wind direction is the direction wind is blowing **from**.

1 Place a marker at your start location.



2 Blow some bubbles then pick one to follow.



3 Chase your chosen bubble, without getting in its way, until it pops or floats somewhere you cannot follow.



5 Repeat steps 2 to 4 ten times if possible.

Start point of first bubble

End point of first bubble

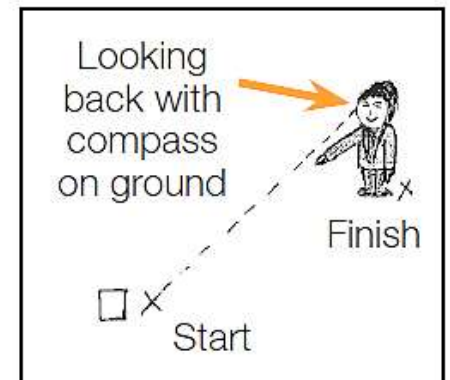


6 Wherever you end up, look back at where you have come **from**.



Start point of first bubble

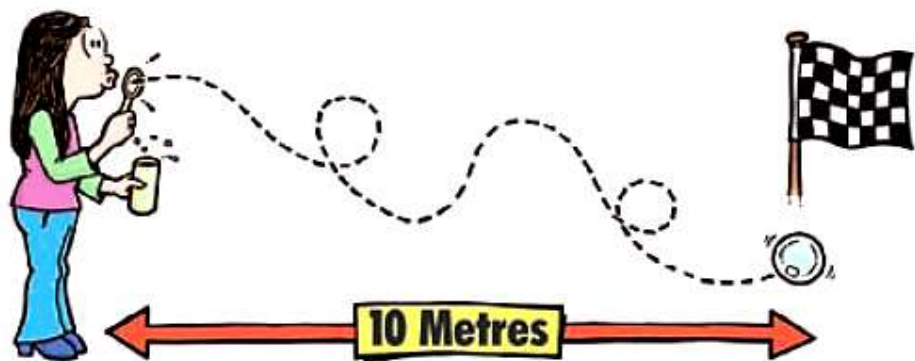
7 Now use your compass to work out the direction back to the starting point. This will give you the average wind direction, because wind direction refers to where the wind is blowing **from**. Do this a few times and note down the results.



Follow a bubble to estimate wind speed

You will need a bubbles tub (with wand) and a watch or phone. Choose an area of open ground, a safe distance from roads and any other dangers.

Two people are needed for this; a 'blower' to blow soap bubbles and a 'timer' to time them using a watch or phone.



1 Place a marker at your start location and another marker 10 metres away in the general direction the wind will carry the bubbles. This is your finishing line. If you haven't got a tape measure, use 10 adult paces.



Start

Finish

2 The blower blows some bubbles, and the timer picks one to follow.



3 The timer uses the stopwatch or watch to measure how long it takes the bubble to reach the finishing line.



Bubble

Timer using
a watch

4 Calculate the wind speed by dividing 10 metres by the time the bubble takes to cover that distance. So if the time it takes is 5 seconds, then the windspeed is $10 \div 5 = 2$ metres per second.

5 Repeat a few times and take an average