

Scale

Make a scaled drawing of the outline of your Forest School site.

Measure the edges of your site and where they key features are.

Decide on the kind of scale you are going to use on your drawing and create a key to show the landmarks.



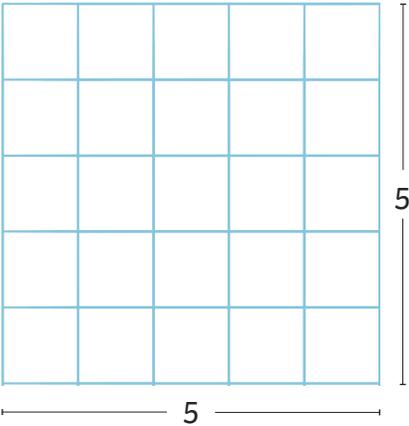
Outdoor Maths Challenge Cards

Calculating area

Measure all of the boundaries of your Forest School site.

Calculate its area.

Your site may be square, rectangular or another shape. What different calculations might you need to use to calculate the site's area?



5

5

$5 \times 5 = 25$
 $5^2 = 25$

Estimation

Look around your Forest School site for something that there is a lot of, e.g. flowers, plants, grass.

Mark a small square area and try to estimate how many of that item are in the square.

Extension

Increase the square area to a larger one and estimate how many of the item are in the square now.

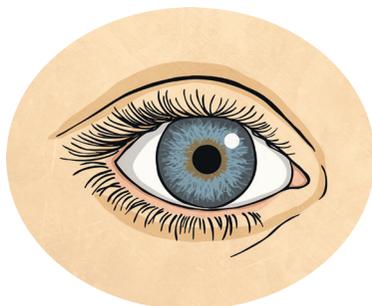


Patterns

Look around your Forest School site. Try to look at it with 'new eyes'.

Can you find any patterns?

Does it have any particular characteristics? What are they?



Angles

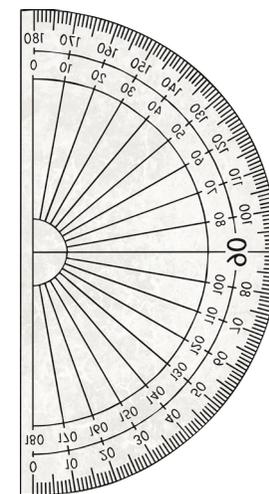
Make a Forest School clinometer using a straight stick, protractor, string and a weight.

Find an object that is high up.

Stand a measured distance from what you are measuring, e.g. 10m.

Measure the angle to the top of the object that you are measuring.

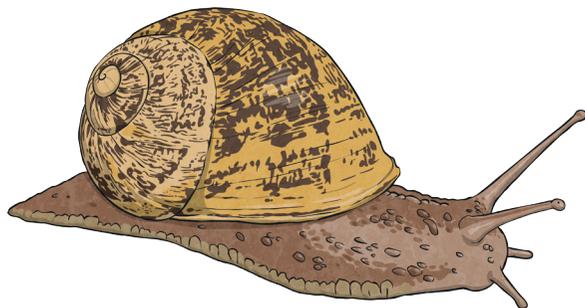
Draw a scaled drawing to calculate the object's height. Don't forget to include the height at which you held the clinometer.



Shape

How many different 2D Shapes can you identify in your Forest School site?

Can you identify 3D shapes too?



Position

Find a partner to work with.

Choose an object that is at another area in your Forest School Site.

Direct your partner to the other area, with their eyes closed.

Use the directions: **left, right, forwards, turn, stop.**

Work out the best way to direct your partner but **ensure that your partner remains safe at all times.**

Extension

What other positional language can you use to direct your partner?
Did you have to use other words too?

Shape

Collect a range of twigs.

Build a pyramid with your sticks.

Can you make it stand up completely by itself?

