



How Tall is That Tree?

Pencil Method

1. Stand far enough from the tree so you can see the top
2. Get a friend to stand by the tree
3. Hold a pencil at arms length, between you and the tree.
4. Close one eye and position the pencil so the point matches with the top of the tree, move your thumb until it is aligned with the tree base (where it meets the ground).
5. Rotate your arm 90 degrees, so the pencil is horizontal (parallel to the ground).
6. Ask your partner to walk away from the tree until they are lined up with the tip of your horizontal pencil (if they are standing far away you may need to use hand signals)
7. Now tell them to stay where they are and go over to them. Measure how far they are from the base of the tree with a tape measure, or by pacing it out. The distance you measure will be equal to the height of the tree!

Ratio Method

1. Use the long end of an a4 sheet of paper (this will be 30cm long). Use a ruler and draw a line on the paper 3cm from the bottom.
2. One person stands by the tree, the other walks away backwards, holding the piece of paper at arms length in front of their eyes, until the top of the paper seem to touch the top of the tree and the bottom of the paper seems to touch the ground.
4. Still holding your paper upright, direct the person standing by the tree to move their arm up and down the trunk, until it is in line with the 3cm mark on the paper and then hold their hand there.
5. Return to the tree and measure how high the hand is off the ground. As the hand was 1/10th of the way up the paper (3cm is 1/10th of 30cm) the tree height must be 10 times the height measured between the ground and the hand.

We'd love to know how big your tree is! Tell us on social media, we're on twitter as @WildCumbernauld and Facebook as Cumbernauld Living Landscape

