



Lock-down
Scout
Outdoor Achiever

Harpenden, Wheathampstead and Kimpton Scout District

Activity 1: Project

Estimate the height of tallest lime tree

Rothamsted Park, Harpenden

You will need:

- A friend
- A stick
- A camera

The concrete base of the skate park is exactly 20m x 30m.

Use the 20m (short) edge to calculate your pace length.

Choose a tall lime tree you want to estimate.

Follow the scheme outlined below. When you turn the stick, ask your friend to stand in line with the tip of the stick.

Pace out the distance between the tree and your friend (this is the tree's height in paces). Record the number of paces (n).

Go to the skate-board park and pace out the 20 metre (short) edge. Count the number of paces for 20 metres (p)

Metres per pace = $20/p$.

The height of the tree is then is $n \times 20/p$ metres.

Take a picture of the tree and record your estimate of height.

Aerial map of Rothamsted Park



Covid 19 Discipline

OBSERVE SOCIAL DISTANCE

Beavers/ Cubs:
Must be with responsible adult

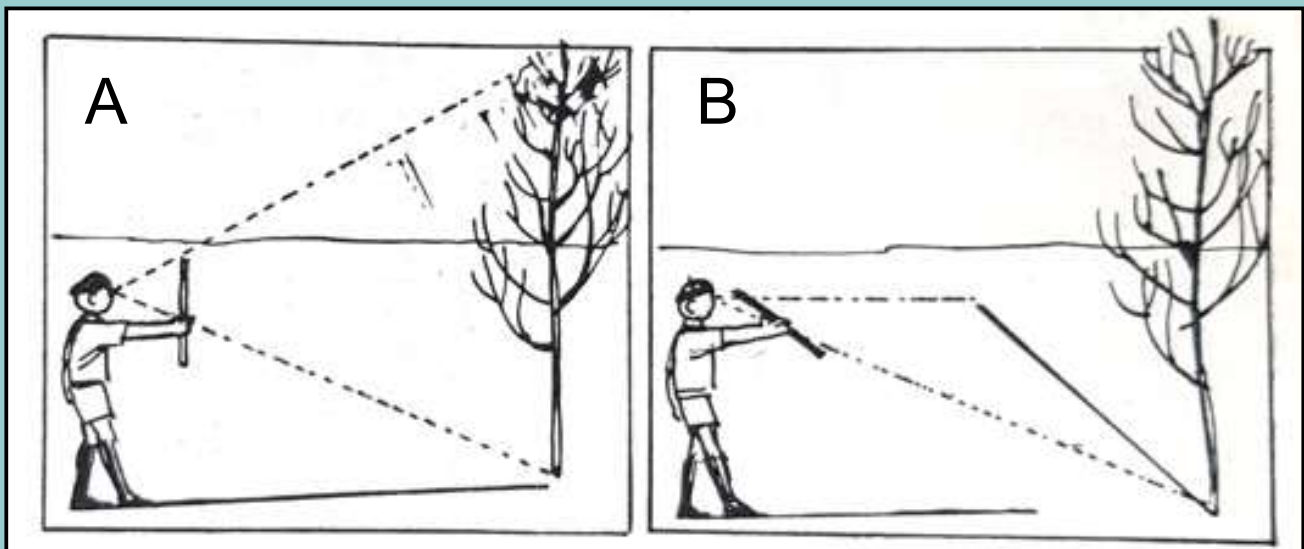
Scouts/ Explorers:
Parents must be informed.
Work with a friend.

Estimate of tree height

Choose one of the tallest lime trees and estimate its height in metres

Share at Zoom meeting

TREE HEIGHT ESTIMATION



At a fair distance from the tree, use a vertical stick at arm's length to fix its height using the tip of the tree and your thumb, as at A. Then rotate the stick to the horizontal, your thumb at the base of the tree, and note on the ground the point that corresponds to the tip of the tree, as at B (use a stick or ask a Scout to stand at the spot). Pace out the distance, convert to metres: job done!