Using shadows to measure height
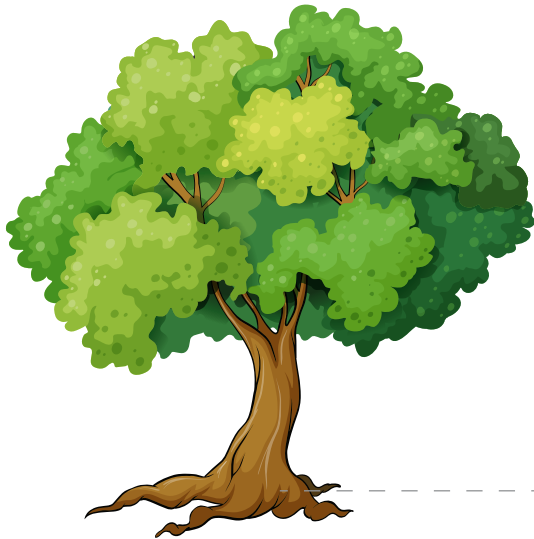
Task:
To roughly calculate the height of a tree using the length of its shadow.

Step 1: Measure the length of the shadow cast by a 1 meter ruler. Record your answer in centimeters.

Step 2: Measure the length of the shadow cast by a tree (this needs to be done straight after measuring the ruler's shadow). Record its length in CENTIMETERS. e.g. 3.6 m = 360 cm

Step 3: Using a calculator, divide the length of the tree's shadow by the length of the ruler's shadow. The result shows the height of the tree in meters.

Extension:
Why do you need to quickly measure the tree's shadow after measuring the ruler's shadow?
Can you explain why this technique works?