

Tree Challenge



Tree Challenge

Your challenge: To find out which is the oldest tree on our school field or on your daily walk!

How can we tell how old a tree is?

One of the easiest ways is to count the rings on the inside of the tree and each ring is 1 years growth. But how can we tell how old a tree is without cutting it down?



Well we can do this with a bit of maths and a tape measure, are you ready for the challenge?

Tree Explorer Pack

What equipment you need in your pack

- Soft tape measure
- Map of the school (not essential)(I have attached an editable word document if you do want a map)
- Results chart (on a different PDF)
- Clip board (not essential)
- Pencil



School Map

Look at the map.

What does it show?

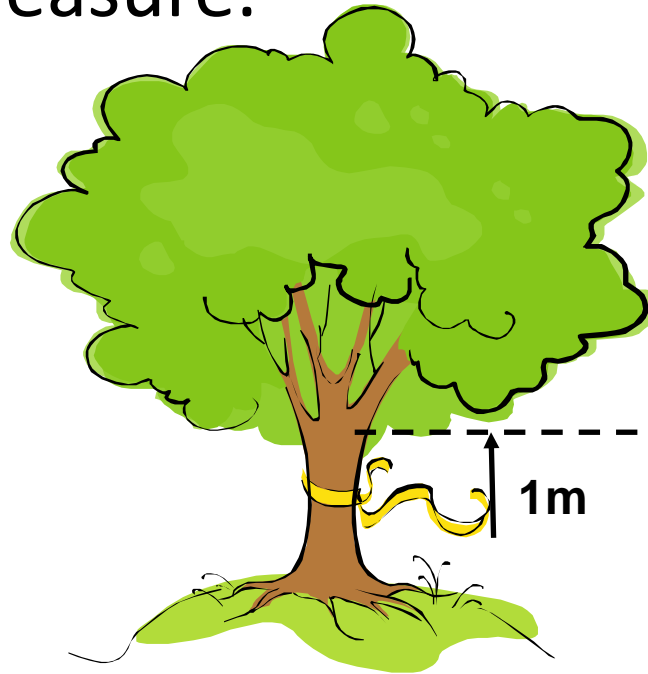
Can you find your classroom?

How many trees does it show?



How to calculate the age of a tree

- 1) using your soft tape measure, measure 1m from the ground against the tree trunk using your tape measure.



How to calculate the age of a tree

- 2) Then, measure the circumference, the circumference is the measurement all the way around the outside of a circle, of the trunk (measuring to the nearest cm!)



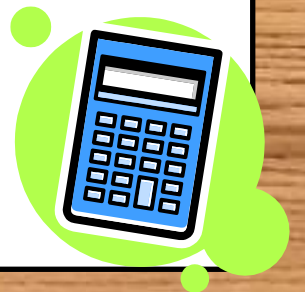
How to calculate the age of a tree

Approximately every 2.5cm of the circumference of the tree represents one year's growth.

So to estimate the age of a living tree, divide the circumference by 2.5.

For example, a tree with a circumference of 40cm will be sixteen years old.

$$40\text{cm} \div 2.5 = 16\text{cm/years old.}$$



How to calculate the age of a tree

3) Record your results using the table.



Which tree was the oldest?

Have you worked out which tree is the oldest?

How old is it?

Was it much older than the other trees?

Extension:

What is the average age of the trees you have measured?

What was the difference in age between the oldest and the youngest tree you have measured?