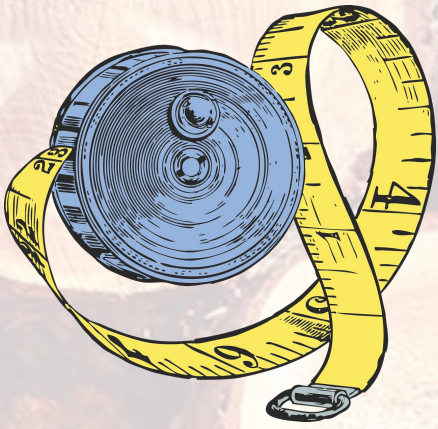


Tree Circumference

**Measuring trees: an inquiry into
circumference, area, diameter, and radius.**



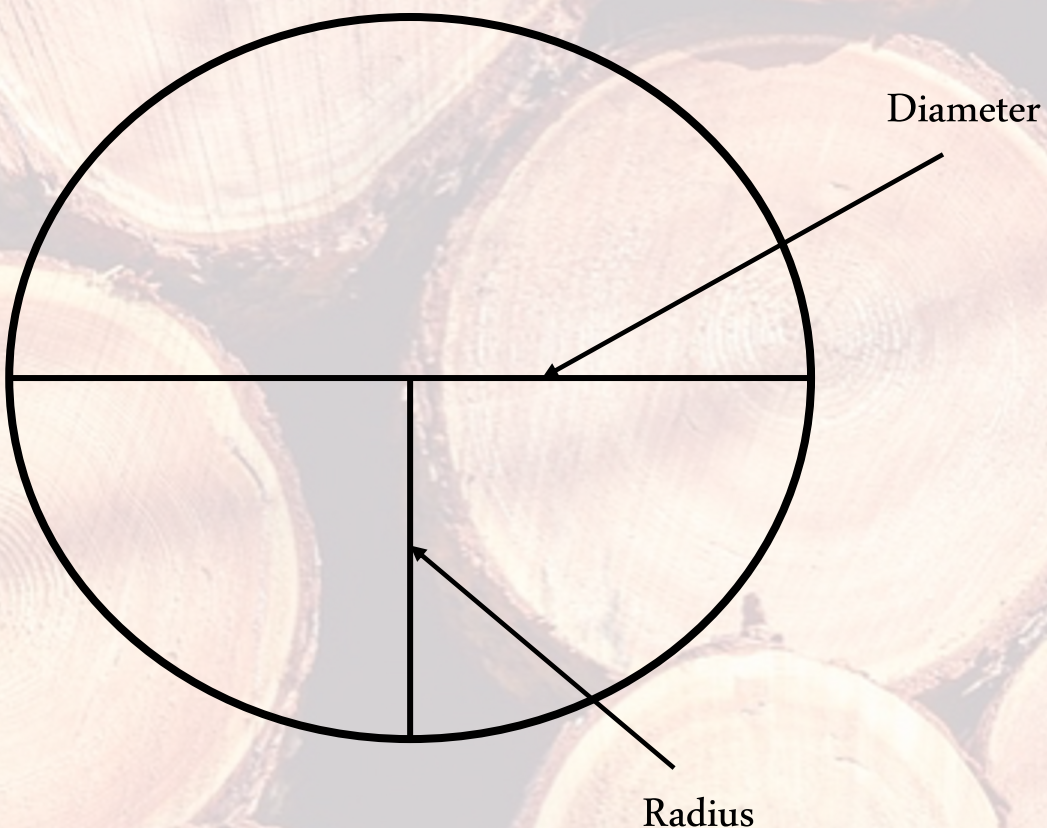
THE
Math Dogs



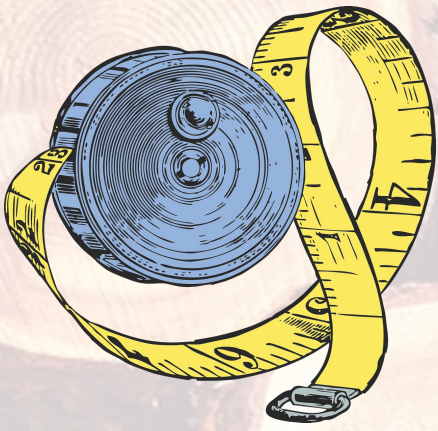
Inquiry time

Find 5 different trees from around your school, a park, or your home. Use a measuring tape to find their circumference (the area around the tree).

Use your knowledge of parts of a circle to calculate the diameter & radius of the tree's trunk.



How to calculate circumference:
 Diameter $\times \pi$ (3.14) also written as: $d\pi$
 or
 2xRadius $\times \pi$ (3.14) also written as: $2r\pi$



Inquiry time

Tree #1

Species _____

Circumference _____

Diameter _____

Radius _____

Leaf sketch

Tree #2

Species _____

Circumference _____

Diameter _____

Radius _____

Leaf sketch

Tree #3

Species _____

Circumference _____

Diameter _____

Radius _____

Leaf sketch

Tree #4

Species _____

Circumference _____

Diameter _____

Radius _____

Leaf sketch

Tree #5

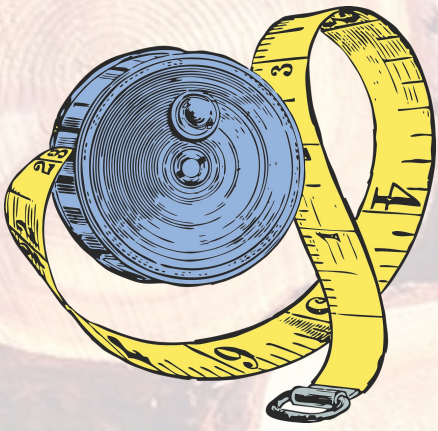
Species _____

Circumference _____

Diameter _____

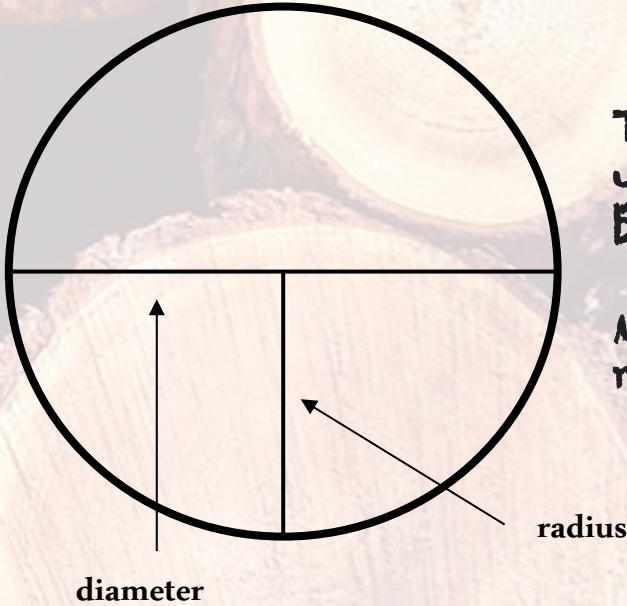
Radius _____

Leaf sketch



Inquiry time

Find the area of one of the world's largest tree trunks!



To find the area of circle, you need to follow the below equation:

Multiply pie (3.14) x the radius squared.
 $A = \pi r^2$

Learn about the 10 species of trees with the largest circumferences in the world. Choose one species you're most interested in and find it's trunk's area. You'll need to first find the radius of the tree before calculating the area.

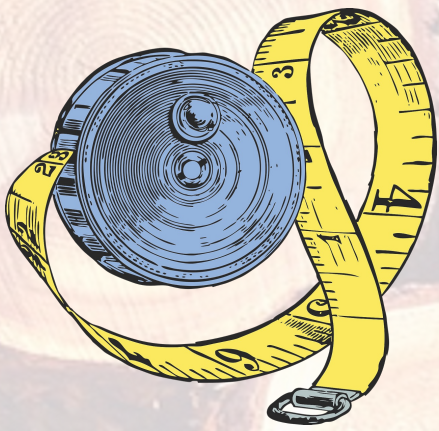
Use this link to guide your research

<https://www.wondermondo.com/top-10-stoutest-trees-species-in-the-world/>

Sketch of tree



Describe how you were able to calculate the area of the tree's trunk in your own words.



Example & Challenge

Tree Example

Species Oak Tree

Circumference 75 inches

Diameter 23.9 inches

Radius 11.95 inches

How to find diameter and radius from circumference

Finding diameter: Circumference $\div \pi$

$$75 \div 3.14 = 23.9$$

Finding radius: Diameter $\div 2$

$$23.9 \div 2 = 11.95$$

Leaf sketch



How old are the trees you measured?

Some trees' ages can be calculated using only their circumferences. Do some research into calculating tree ages by circumferences and see if you can find their ages!