

Connecting Kids to Nature

Nature is a great teacher and getting kids outside to learn and play is good for their brains and their bodies. Try this outdoor activity from Project Learning Tree® - it's safe, fun, and educational!

How Big Is Your Tree?

Trees come in various shapes and sizes. In this activity, children will measure trees in different ways and become familiar with tree scale and structure. They will also learn the importance of standard units of measure and measuring techniques.

Any time you are outside, select a tree for children to measure. Begin by asking youth how they might measure something without the proper tools. Then challenge children to measure small outdoor objects (leaves, branches, rocks) using their own body parts: a foot, hand, arm, or finger.

Guide children to your selected tree and ask them to estimate the following:

- Height
- Circumference
- Diameter at Breast Height (DBH)
- Width of Canopy (or Crown Spread)

Depending on the age and ability of the children, you may want to provide a six inch ruler or five foot piece of string for assistance. You can request that calculations be estimated in body measurements (hand spans, arm lengths, etc.) or accepted units of measure (feet, meters, etc.) Ask: why might it be useful to measure trees?

Tree Fact

As autumn approaches, remember the value of falling leaves. Minerals taken up by these leaves are returned to the soil through decomposition, providing nutrients for other trees and plants.

On a sunny day, show students how to measure shadows and use a ratio comparison to determine tree height. The mathematical proportions are outlined in the box below. Invite children to practice using the illustrated example.



$$\frac{\text{Tree's Height}}{\text{Tree's Shadow}} = \frac{\text{Child's Height}}{\text{Child's Shadow}}$$

OR

$$\text{Tree's Height} = \frac{\text{Child's Height} \times \text{Tree's Shadow}}{\text{Child's Shadow}}$$

Make Learning Fun!

Encourage your child's school to incorporate learning outdoors.

For more activity ideas and materials:

- Attend a PLT workshop, www.plt.org/state-network/
- Visit shop.plt.org



Project Learning Tree®
(PLT) is an initiative
of the Sustainable
Forestry Initiative.

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