

Connecting Kids to Nature

Try this activity in a forest—a natural place to learn!

For over 30 years, Project Learning Tree® has used the forest as a “window” to help young people gain an awareness of the world around them and their place within it. Blending a walk in the forest with a fun and engaging PLT activity creates a powerful learning experience for children of all ages. Here’s one idea from PLT that introduces the concept of measurement.

Activity 67: How Big Is Your Tree?

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.

Doing the Activity

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)

OHIO TREE FACTS

Ohio currently has ten of the national champion trees: Arborvitae, Coffeetree, Cottonwood, Elm, Hawthorn, Magnolia, Maple, Oak, Plum, and Sycamore.

The largest tree in the world, the “General Sherman Tree,” is found in California’s Sequoia National Park and named for Ohio Civil War General, William T. Sherman.

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



Tree's Height = x
Tree's Shadow = 63 feet
Child's Height = 4 feet
Child's Shadow = 6 feet

On a sunny day, one can 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. Answer provided below.

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

Adapted from Activity 67: How Big Is Your Tree? from
Project Learning Tree's PreK-8 Environmental Education Activity Guide.

Discover how PLT can help you teach... from nature!

- Attend a workshop near you to receive PLT activity guides, ideas, tree measuring sticks, and materials.
- Contact your PLT-Ohio State Coordinator: Sue Wintering, plt@dnr.state.oh.us, 614-265-6657.