**PROJECT LEARNING TREE®**

**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!**

# NATURE'S SKYSCRAPERS

## Explore tree structure and scale by using different methods to measure them.

Trees come in various shapes and sizes. Take children outside and ask them how they might measure something without a tool like a measuring tape. Then challenge children to measure small outdoor objects (leaves, branches, rocks) using their own body parts: a foot, hand, arm, or finger.

Select a tree to measure. Guide children to your selected tree and ask them to estimate the following:

- Height
- Circumference of the branches
- 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 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 scientific units of measure (feet, meters, etc.) Ask: why might it be useful to measure trees?

On a sunny day, show children how to measure shadows and use a ratio comparison to determine tree height. Instructions to esitmate tree height are outlined below. Invite children to practice using the illustrated example.

## MAKE LEARNING FUN!

Encourage your child's school to incorporate outdoor learning by connecting with your local PLT program.

Visit plt.org/yourstate

## FOREST FACT

did you know

**Giant sequoias (*Sequoiadendron giganteum*) are the most massive tree species on Earth. The tallest known giant sequoia is 316 feet (96 m) tall, or about as high as a 31-story building.**

## ESTIMATE TREE HEIGHT



1. Measure the length of the tree's shadow, the length of your child's shadow, and your child's height, all in inches.

2. Calculate the height of the tree using this formula:

   height of tree = length of tree's shadow x child's height / length of child's shadow

## Visit plt.org for more!