

Tree Science Lab: Nature Lab

Topics covered: The Tree Science Lab focuses on tree identification using dichotomous keys to decipher leaf, bark, and size differences. After field sampling on Lichterman forested trails, recorded data will be analyzed in the lab classroom to determine tree diversity and health of the overall forest stand.

Ages: 2nd – 8th

Purchase Details: \$8 per student

Programs can be reserved by phone: 901-636-2221
Tuesday - Friday, sessions by appointment

Objectives:

1. Learn about tree identification properties.
2. Use dichotomous keys.
3. Explore the forest trails.

Vocabulary: adjusted for specific grade levels

Dichotomous key

lobe

canopy

understory

photosynthesis

ecology

deciduous

evergreen

conifer

seed dispersal

capillary action

petiole

node

Fun Facts:

- Scientists can study tree rings to determine how old a tree is. Tree rings can also tell us about environmental change that has happened throughout a tree's life, like droughts or floods.
- The oldest tree in the world, a spruce tree in Sweden, is thought to be over 9,000 years old. No other living thing lives as long as trees.
- Trees can "talk" to each other by sending out chemical signals through their leaves and root systems.
- Lichterman Nature Center is a certified arboretum with over 60 species of native trees.

Web Resources:

Tennessee Wildlife Resource Agency – www.tn.gov/twra.html

Tennessee Wildlife Federation – www.tnwf.org

Exhibit Information at Lichterman Nature Center – www.memphismuseums.org/lichterman-nature-center/

USDA Forest Service – <https://www.fs.usda.gov/learn>

Where: Lichterman Nature Center Labs

When: Year-round, Tuesday – Friday, sessions by appointment

- **Standards:**
 - (Grade Level) 2 - 8
- **Tennessee: (Life Science)**
 - LS (1-4), ESS3, ETS2
- **Mississippi: (Life Science)**
 - L (1-4), E10
- **Arkansas**
 - LS 1, 2, 3, 4