



## Trees!

**Overview:** In this lesson and its accompanying activities students will learn how humans, and animals use trees, how trees make their own food through photosynthesis, and also learn some simple identification techniques.

### Essential Questions:

- How do animals and humans use trees?
- How do we identify trees?

### Enduring Understandings:

- Humans use trees for a variety of reasons, from obtaining food, to using tree products to make things we use, to getting oxygen from the process of photosynthesis.
- Animals use trees in ways that are different from, and sometimes similar to, humans.
- Trees provide oxygen as a byproduct of photosynthesis, the process through which they make their own food.

### Objectives:

#### Students will ...

- Learn about the different things humans obtain from trees and tree parts.
- Learn the basic parts of a tree.
- Explore how animals use trees.
- Learn the basics of how trees make their own food through photosynthesis.

### Vocabulary:

- Crown -- The part of the tree that grows upward with branches and leaves
- Bark -- The outer covering of the trunk
- Trunk -- The thick shaft that extends from the roots to the crown
- Leaf -- The parts of the tree where photosynthesis is performed and that give the crowns their shape
- Fruit -- The part of the tree that contains seeds that are spread and planted by animals that eat the fruit.
- Roots -- The long, finger-like parts of the tree that extend underground from the trunk and that pull water and nutrients from the soil and into the tree.
- Sap -- The sticky glucose, or sugar, that the tree produces as food for itself.
- Cambium -- The layer directly under the bark. This is the part of the tree that makes the rings that are counted when determining age.
- Sapwood -- The layer under the cambium where the sap is carried to the tree.

- Heartwood -- The hard, inner core of the trunk that is dead, but very sturdy.
- Samara -- A seed with wings that carry seeds away from the parent tree. It is sometimes called a "helicopter seed," with wing
- Photosynthesis -- The process through which trees use sunlight, carbon dioxide, water, and nutrients for the soil to make glucose, or the sugar that feeds them.
- Carbon Dioxide -- An invisible gas that humans and animals exhale.

**Materials:**

- A way to watch the Trees! video
- Printed copies of the Tree Scavenger Hunt
- Printed copies of the Label-a-Tree worksheet.
- Printed copies of the leaf identification page

**Activity 1: Who needs trees? (video)**

1. Watch the video. Afterward, list with your class (at-home learners can make their own lists) as many of the ways that trees help us that you can remember. Maybe take a look at what's in your classroom or home and figure out what items came entirely, or partly, from trees.

**Activity 2: Parts of a tree (Google slide and worksheet)**

1. Launch the Google slide, and click through it.
2. Get out a pencil, markers and print the "parts of a tree" worksheet.
3. Fill it out, and color your tree!

**Activity 3: Tree Scavenger Hunt**

1. Print the Tree Scavenger Hunt, and then hit your yard, the neighborhood, the nearest park, or your schoolyard to see how many of the tree things you can find.