



Tree Health Check-up

Purpose

Just like people can be healthy or sick, so can trees! Experts who study trees (called **arborists**) look for symptoms in trees to determine whether they are healthy or not. In this activity, learners will look for some of these indicators in a tree nearby.

Time

15-30 minutes

Materials

- Pen or pencil (colored pencils or crayons optional)
- Clipboard or other hard writing surface
- Attached worksheet (or another way to draw or take notes)

Brainstorm

What do trees need to grow and be healthy? How are those similar to what humans need? What signs might you see in trees that show that they are healthy or unhealthy?

Observe

Chose a tree in your yard or neighborhood to observe. Be sure that you can observe it safely, and that you have any permission needed if going on private property. Use these guiding questions to pay attention to specific aspects of the tree and its surroundings. Use the space on the accompanying worksheet or another notes page or science journal to record your observations in the form of pictures or words.

Look at the leaves or needles of the tree:



- Are the leaves **wilted** or dry, or have spots or holes?
- Are the leaves yellow or brown?

NOTE: Brown leaves and dry edges may be normal during the fall or dry season, especially for trees that lose their leaves seasonally (called **deciduous**).

In the space provided on the worksheet or in your science notes or journal, draw pictures of some of the leaves or needles you see.

Examples:



Left to right: An example of frost damage ([New York Department of Environmental Conservation](#)); leaves with oak wilt ([Bay County, Michigan](#)); a leaf from a tulip tree (yellow poplar) with ozone damage ([National Park Service](#).)

Look at the bark, branches and trunk:



- Do you see damaged, broken or dead branches?
- Are there places where insects, birds or other animals have chewed or scratched the bark?
- Is there damage from humans, like a lawn mower running into the trunk (or over the roots)?

In the space provided on the worksheet or in your science notes or journal, draw a picture of the trunk or branches, especially if there is evidence of damage.

Examples:



Left to right: A cut in a tree trunk, broken branches, and a tree chewed by a beaver (photos by the GLOBE Observer team)

Look at the space around the tree:



- Does the tree have enough room, or is it too close to buildings, pavement, other trees, or power lines?
- Does the tree have access to sunlight?
- Does the soil seem either too dry or too wet? (Either extreme may be bad for some trees.)

In the space provided on the worksheet or in your science notes or journal, write notes about the space around the tree or draw a picture of the tree in its environment.

Examples:



Left to right: A tree planted under a power line, a tree growing through a fence, and a tree in a puddle of water (photos by the GLOBE Observer team.)

Key Words

Arborist – also called a tree surgeon, a professional who studies and takes care of trees

Wilted – when a plant, leaf, or flower becomes limp through heat, loss of water, or disease

Deciduous – a tree or shrub that sheds its leaves every year

Extend the Learning

- Download the GLOBE Observer app, observer.globe.gov/get-the-app, to share your observations of trees with a global community of citizen scientists. You can add comments about tree health in the Field Notes section.
- Trees help store carbon and provide habitats for many different animals and insects. Visit the other science journeys in the Trees Family Guide to learn more, observer.globe.gov/trees-family-guide.
- Soil is a very important for all plants, including trees. You may enjoy the Elementary GLOBE book, “The Scoop on Soils” to dig into that topic more, www.globe.gov/web/elementary-globe/overview/soils.

Tree Health Check-Up

Worksheet

Just like people can be healthy or sick, so can trees! Experts who study trees (called **arborists**) look for symptoms in trees to determine whether they are healthy or not. You can look for some of these indicators in a tree near you!

Select a tree to observe. Use the spaces below to record information about your selected tree.

Leaves or needles:

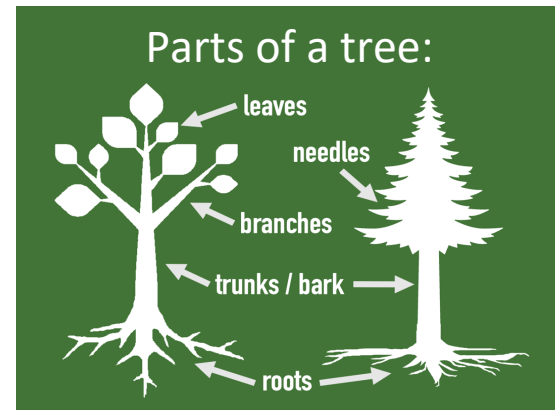


Draw pictures of some of the leaves or needles you see, noting any holes or discoloration.

Bark, branches and trunk:



Draw a picture of the trunk or branches, especially if there is evidence of damage.



Vocabulary:

arborist – also called a tree surgeon, a professional who studies and takes care of trees

Space around the tree:



Use the area below to write notes about the area around the tree or draw a picture of the tree in its environment. Pay attention to the space the tree has to grow, and the condition of the soil under the tree.



Download the GLOBE Observer app to share your observations of trees with a global community of citizen scientists. You can add comments about tree health as part of your observations, in the Field Notes section.



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