

Totally Trees

GRADES: K-2

Key Words and Definitions

TREE : plant that is usually more than 10 feet tall and has roots, a trunk, branches and leaves. The trunk and branches are made of fibers called wood.

TRUNK : woody stem of a tree.

ROOTS : fibers that anchor the tree to the soil and suck up water and minerals.

BRANCHES : structures that support the leaves and grow towards the sunlight.

LEAF : flat, blade-like structure that collects sunlight and makes sugar.

SEEDS : part of a tree that can grow into new trees.

*Look for keywords—**BOLDED**—throughout this lesson extension!*

Activity 1: Seedling Relay Race

One, approximately 25-minute session; pre-visit

LEARNING OBJECTIVE

Students embody the functions of different tree parts as they engage in an all-class relay race.

MATERIALS

- Spoons
- Blue ping pong balls
- Masking tape
- Yellow balloons
- Optional: candy



PROCEDURE

Tell your students that today they take part in a relay race! This race will teach them more about the roles of each **TREE** part. Take a moment now to define or reinforce tree parts and their functions. If you would like, pair each tree part with a body movement to help students remember the functions. **ROOTS** slurp water and minerals. Have students use their fingers as roots and make a slurping sound. **TRUNKS** transport water and minerals and keep the tree safe. Have students stand as tall and still as possible. **BRANCHES** help leaves find sunshine. Have students wave their arms over their heads. **LEAVES** make water and sunshine into tasty sugar for the plant. Have students wiggle their fingers and reach up towards the light. Divide the class into teams and show them the racetrack.

- **Station 1 (roots)** There should be squiggly-tape paths for roots. Here, the student in the root role carries “water”—a blue ping pong ball on the spoon—to the trunk. They must be careful not to drop it!
- **Station 2 (trunk)** The root then passes on the “water” to the trunk student, who must balance on one, thin line of tape all the way to the branches and leaves.
- **Station 3 (branch + leaf)** This station involves two students. One student represents a branch, while the other represents a root. The branch student must take the “water” from the trunk. Then the branch must help the leaf student to reach the sun—a yellow balloon a few feet away. The branch and leaf must be connected at all times (i.e., holding hands). The branch student’s foot may not leave the taped line. The leaf’s job is to reach for the “sun” (i.e., pick up one balloon). Once branch and root have the “sun,” they can touch it to the “water.” This will result in sugar for the whole tree! If possible or desired, give each student a piece of candy to represent sugar.

Activity 2: Tree Sketching

One, approximately 30-minute session; post visit

LEARNING OBJECTIVE

Students create tree sketches to highlight their observational skills and share what these observations can tell us about trees and their environment.

MATERIALS

- Paper
- Pen or pencils
- Pictures of trees or trees observed during a nature walk
- Examples of tree sketches (optional)



PROCEDURE

Share with students that they will be creating tree sketches to document their observations of trees. This activity can be completed outside during a nature walk or in your classroom. If inside, provide students with multiple images of different species of trees.

Explain to students that we can learn a lot about trees if we slow down, pause and observe. One way to observe is by sketching or drawing. Show examples of tree sketches that include a tree silhouette and **LEAVES** and review the different parts of trees with your class.

While sketching a tree you can begin to observe key information about it. For example, the color of a tree's leaves can tell us what season it is, markings on its **TRUNK** or loss of **BRANCHES** could mean that the tree endured a serious weather event, like a great storm or a fire, or nests on a tree's **BRANCHES** show the relationship that tree has with animals. If evident, a tree's rings tell us its age, each ring corresponding to roughly one year in that tree's life. Our observations can also help us identify tree species.

Remind students to consider these thoughts as they sketch. Students' sketches should include all the different parts of the tree that you have reviewed. When necessary, prompt them to include more details in their work. For instance, you might ask, "I see that you are drawing a leaf. What are its edges like?" You can also have students write descriptions of their drawings, as appropriate.

The culmination of this activity is for students to share their work, either in groups or with the entire class. Have them explain what attracted them to the trees they selected to draw, describe their sketches, including the different shapes of their trees, and share how sketching can be a tool for continuing to observe nature.



