

Please Return To Camp
Woodlands

Lesson: Tree Treasure Hunt

Topic/Essential Question: How do trees meet their basic needs?

Unit: "Why Are Trees Terrific?" Kindergarten Environmental Literacy

Content Standards:

- NGSS K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.
- SL.K.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
- SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.
- K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
- Foundation for EL Standard 4.0 Populations, Communities, and Ecosystems.



Length of Lesson: 30 minutes *(Although each group will be split in half, each instructor will teach both parts of the lesson. Instructor 1 will start with activity A and end with activity B and vice versa for Instructor 2.)*

Student Outcome: The student will explain how each part of a tree helps meet its basic needs.

Knowledge of the Learner:

- Prerequisite knowledge, skills, and processes: trees and animals are living things with basic needs; listening, observing, following instructions, comparing, and contrasting.
- Student needs, interests, previous learning: These will vary among students.
- Conceptual difficulties: That a "treasure" could be any important or valuable thing. The functions of the parts of a tree.
- Differentiated Instruction: The instructor may pace the lesson according to the responses and participation of the students.

Knowledge of Content:

- Content knowledge for instructor: Provided in the text of the lesson.
- Vocabulary: Treasure, valuable, important, tree parts (roots, branches, leaves, bark, trunk), absorb.
- Resources:
 - Cloth bags
 - "Gold" coins in treasure chests
 - Clipboards
 - Crayons
 - Blank papers for leaf rubbings
 - Tree cookies/string

Pre-Assessment: During the opening at the beginning of the field trip, Camp Woodlands staff will invite students to share what they have learned at school about trees, including trees as living things, trees as plants, parts of a tree, and what makes up a forest.

Activity A: Treasure Hunt

Set Up Before Students Arrive:

1. Review the route of your tree treasure hunt and place treasure chests with gold coins at each station.
2. Place the bin with the cloth bags close to where the treasure hunt starts (*Close to the tree with the roots showing, item "A" below.*)
3. Set out clip boards with a blank sheet of paper in each one on the picnic table along with crayons.
4. Count out enough tree cookies for each group and place by the campfire circle (*This is where the treasure hunt ends.*)

Motivation/Warm-up:

1. Welcome the students to the activity and introduce yourself.
2. Inform the students that they are going on a tree treasure hunt.
3. Ask students to explain the word "treasure" (something valuable or important). Explain that they will find "tree treasures" on their treasure hunt.

Procedure:

1. Give each student a cloth bag.
2. Explain that the students need to stay together on the walk and not run ahead.
3. Take students on a walk, searching for one treasure at a time. At every stop, ask the question and discuss the answer with the students. Then put a gold coin in each student's bag.
 - a. A tree lying down with its roots showing. Invite students to touch the roots. Why are roots valuable to a tree? *They absorb (soak up) water for the tree, help trees stand up.*
 - b. A tree with an opening its bark. Have students feel the bark. How does the bark feel? What do you think happened that caused this tree to have an opening in the bark? Why is bark valuable to a tree? *It acts like skin to protect the tree.*
 - c. A large stick on the ground. This used to be the branch of a tree. Why are branches valuable? *They carry water to the leaves. They hold the leaves and help the leaves reach the sunlight.*
 - d. A tree with more than one trunk. Invite students to touch the tree trunk and peek between the trunks. Why is the trunk valuable to a tree? *It carries water from the roots up to the leaves, holds the branches.*
 - e. A dead log lying on the ground. What part of the tree did this used to be? *Trunk or branch.* Why are dead logs important? *They provide food and homes for animals and insects, bugs will eat the log and help turn it into soil.*
 - f. A dead tree standing up. Why are dead trees valuable? *They provide homes for many animals, birds and insects. They may live in a hole in the tree called a tree "cavity."*

At this point of the treasure hunt, you will continue, but the focus will now be on leaves.

Have students look at leaves on the trees (or on the ground). Ask students, “Do all trees have the same kind of leaves?” *No*. Why are leaves important? *The leaves use sunlight, water and other ingredients to make food for the tree*. Let’s go visit some trees to investigate their leaves.

- g. Find a tree with leaves (*In winter, find a tree that would have leaves in the warmer months*). Have students describe the leaves. Ask students, “Why are leaves important?” *The leaves use sunlight, water and other ingredients to make food for the tree*.
 - h. Find a Pine tree (*Look for long skinny green needles*). Have students describe the needles. Tell them that the needles **are** the leaves. Ask students, “Why are leaves important?” *The leaves use sunlight, water and other ingredients to make food for the tree*.
 - i. Find a Holly tree (*Look for prickly green leaves*). Have students describe the leaves. Ask students, “Why are leaves important?” *The leaves use sunlight, water and other ingredients to make food for the tree*.
4. At the end of the hunt, allow students to count their coins. Ask students to turn in their coins and bags. Award each student with a Tree Cookie necklace as their treasure to keep. Tell the students, “They are now Junior Arborists (*Someone who takes care of trees*).

Assessment: Review the parts of the tree by reading the job of each part and having students tell the name to a partner. Encourage students to use their bodies and act out each tree part.

- These parts absorb water from the ground. *Roots*. Have students wiggle their toes.
- This part carries water up to the branches. *Trunk*. Have students stand straight and tall.
- This part protects the outside of the tree. *Bark*. Have students pat their skin.
- These carry water to the leaves and hold the leaves. *Branches*. Have students stretch out their arms.

Activity B: Tree Rubbings

Procedure:

1. Explain that students will make a leaf rubbing to show different kinds of leaves.
2. Allow each student to pick up a leaf from the ground to make a leaf rubbing. Have students look at the nearby trees and try to see which tree their leaf came from.
3. Return to the picnic table. Demonstrate to the students how to make a leaf rubbing.
4. Give each student a clipboard with a blank sheet of paper. Have students write their names on their pages.
5. Assist students in clipping the leaf under the page on the clipboard. Demonstrate how to create a leaf rubbing.
6. Allow students to create their own leaf rubbing.
7. Have students describe the similarities and differences in leaf shapes.
8. Collect the pages to give to the group’s chaperone who will give them to the teacher at the end of the day.

Assessment: What part of the tree uses sunlight, water and other ingredients (things, stuff) to make food for the tree? *Leaves*.