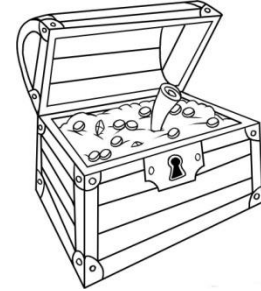


Lesson: Tree Treasure Hunt

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 *(After the whole group introduction, the group will split into two smaller groups to do the treasure hunt. The groups will join up at the end for the awards ceremony.)*

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
 - Tree cookie necklaces

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.

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 and tree cookie necklaces where the introduction will take place.

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.
 - **Clue #1** 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.*
 - **Clue #2** A tree with an opening in 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.*
 - **Clue #3** 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 them reach the sunlight.*
 - **Clue #4** A tree with more than one trunk. What letter does this look like? Make this shape with your body. Why is the trunk valuable to a tree? *It carries water from the roots up to the leaves, holds the branches.*
 - **Clue #5** 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. Woodpeckers may also eat the bugs in the log.*
 - **Clue #6** Find a tree with leaves (*In winter, find a tree that would have leaves in the warmer*

months). Have students describe the leaves. Why are leaves important? *The leaves use sunlight, water and other ingredients to make food for the tree.*

- **Clue #7** “Let’s find a PINE tree.” (Look for long skinny needles.) Are these leaves? *Yes*. What are these leaves called? *Needles*. How are these leaves similar to/different from the other leaves we saw? *Why are the needles important?” They are the leaves that make food for the tree.*
 - **Clue #8** “Let’s find a HOLLY tree.” (Look for prickly green leaves.) How are these leaves similar to/different from other leaves we saw? How do prickly leaves help the tree?” *Protect from deer eating them*. Note: Depending on the season, holly trees may have white flowers or berries (green or red). This is part of the life cycle of the tree. The flowers will turn into berries. The berries have seeds inside. The seeds can grow into new trees.
4. At the end of the hunt, allow students to count their coins. Ask students to turn in their coins and bags. Have an Olympic-style awards ceremony and give each student a tree cookie necklace as their treasure to keep. Tell each student, “Congratulations. You are now a Tree Expert.”

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.