



Tree Life Cycle

A Journey from Seed to Soil

Purpose

Learners will learn about the life cycle of trees by exploring the forest for the different stages of tree growth. This activity provides learners with further evidence that all living things, or **organisms**, grow and change as they progress through their life cycle. Additionally, learners will learn that trees can be good **habitats** at each stage of life.

Time

1 hour

Materials

- Age-appropriate book that discusses a tree's life cycle (possibilities could include *The Little Acorn*, *Because of an Acorn*, *From Seed to Plant* etc.)
- Laminated or printed scavenger hunt sheets (a fall and spring version are provided)
- Clipboards
- Dry erase markers or other writing utensils

Safety Tips

- Appropriate footwear is essential when hiking through the forest
- Discuss hiking etiquette (walking single file, remaining on the trail, remaining behind the trail guide, etc.)
- Discuss the importance of utilizing senses of sight, hearing and smell, but NOT sense of touch or taste unless specifically invited to by trail guide.

Overview

The related literature, forest hike, and scavenger hunt will help the learners learn that trees, like themselves, have life cycles. They will observe the changes that occur during plant growth and development and will use their senses to learn about the natural world on the forest hike and scavenger hunt.

What to Do

1. Begin with a discussion about the learners' own development, helping them to recognize that they began life as a baby in a way that is similar to a tree beginning life as a seed. Ask questions to help them see the life cycle comparisons between people and trees.
2. Read literature of choice, preferably at the edge of the forest.
3. Ask about what stages of the tree they expect to find in the forest, reminding them of the stages as discussed in the literature:
 - A **seed** is planted in the ground. For example, an oak tree seed is called an acorn. (Discuss the types of seeds representative of the trees in your local area.)
 - The seed **sprouts**. It grows roots, a stem, and leaves.
 - As the sprout begins to grow, it turns into a **sapling**. Saplings have small branches and leaves.
 - As the sapling grows, it turns into a **mature tree** or an adult.
 - When the tree dies, it will become a **snag**, a dying or dead tree that remains upright, or a **fallen log**.
4. Once the learners have made predictions about what they will observe in the forest, it is time to hike through the forest. Remind the learners of the safety considerations.
5. Using observation and inquiry, hike throughout the forest while looking for the various stages of trees, stopping to feel the bark from trees, safely explore fallen logs, and inspect moss or mushrooms that may be growing on tree snags and eventually helping them **decompose**, or break down. Over time, the tree will become part of the rich soil that will provide a **habitat**, or home, for another seed.
6. Once the forest hike is complete, hand out Scavenger Hunt cards to groups of 3-4 learners. A meadow or the forest edge are safe and ideal locations to find most items on the list. Help the learners connect each item found with a particular habitat and stage of a tree's life cycle. (Example: The squirrel might make its home, or habitat, in the branches of a mature tree.)

Questions for Review

- What **organisms** did you see or hear?
- Did you see the different stages of a tree's life cycle?
- What are the stages of a tree's life cycle?
- What organisms make a home in trees during their different stages of development?

Key Words

Decompose: To break down into simple parts

Fallen Log: A large piece of a cut or fallen tree

Habitat: A home or environment for plants and animals

Mature Tree: A tree that is complete in natural development or growth

Organisms: A living thing made up of one or more cells and able to carry on the activities of life such as using energy, growing, and reproducing)

Sapling: A young tree with a slender trunk

Seed: The part of a seed plant that can grow into a new plant

Snag: Standing dead or dying trees

Sprout: A young shoot from a seed or root

Extension Activity

Ask the learners to act out the life cycle of a tree. They can curl up as a seed, kneel to sprout, stick their arms out like branches, wiggle fingers for leaves (sapling), stand up to grow tall into an adult tree, spread their feet to show roots, and fall over as a fallen log. Repeat this, going faster each round, and prepare for lots of laughter!

Scavenger Hunt (Fall)



Insect



Nest



Bird



Acorn or seed



Hole in a tree



Animal tracks



Leaf



Birdhouse

Scavenger Hunt (Spring)



Insect

Nest



Flower

Acorn or seed



Spider web

Squirrel or other mammal



Hole in a tree

Animal tracks

