

Activity: Life of a Tree Enactment

Activity Level: Basic

Source: Adapted from Project Learning Tree

Purpose

Students will act out the life cycle of a tree.

Example Topics It Supplements

Following directions; active listening

Activity Snapshot

1. Organize and Prepare Supplies
2. Read Background Information
3. Interest Approach
4. Conduct Activity
Students will learn the structures and functions of trees as they imitate the teacher's movements as he or she enacts the life of a tree.
5. Ask follow up questions and make the connection to agriculture.
 - What changes happened for the tree?
 - What purpose do trees serve?
 - Why is it important to care for trees and plant new trees?

State Standards It Supports

- Science 2.3.2.b—Describe how living things change as they grow.
- LA 1.3.2.c—Complete a task following one/two-step directions.
- LA 2.1.5.c—Acquire new academic and content-specific grade-level vocabulary. Relate to prior knowledge, and apply to new situations.

Materials

- None

What's the Connection to Agriculture?

Trees are vital for humans and animals. They provide many needs for living things—habitat, food, absorption of carbon dioxide, and release of oxygen. Trees are also materials for tools and shelter. The industries of forestry and forest farming provide careers to ensure that trees continue to be maintained and planted to benefit us all!

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PROCEDURES:

1. Organize and Prepare Supplies

No supplies necessary for this activity.

2. Background Information

Trees are living things that have certain needs to survive. There are also several things that trees provide for other living things. The structures and functions of the tree will be introduced and brought to life by an enactment of a tree's structures.

3. Interest Approach

Have students brainstorm all the different parts of a tree. Record on a writing surface. *Expected responses: roots, leaves, branches, fruit, trunk, bark, buds, etc.*

4. Conduct Activity

Ask students to imitate your movements as you enact the life of a tree.

- a) Curl up in a tight ball—you are a seed. This is how trees start! All the information needed to grow into a full size tree is found in this little seed!
- b) Uncurl and kneel—you've sprouted. A small plant has come out of the seed and makes its way through the soil up to the surface. This is called germination. Seeds need water, oxygen, and the proper temperature to germinate.
- c) Stick up one arm (fist clenched)—you've grown a branch. The tree is growing!
- d) Stick up the other arm—you've grown another branch.
- e) Wiggle your fingers—leaves! Leaves have grown off the branches. This is how a tree makes food; the leaves use light to convert carbon dioxide and water into sugars.
- f) Stand up (feet together)—you are growing tall! The tree uses nutrients to continue to grow! You are providing oxygen for humans and animals to breathe and also providing shade!
- g) Spread your feet apart—you've grown a lot of roots to bring you water and minerals. The roots also serve to anchor the tree so wind and water don't carry it away.
- h) Wiggle your toes—you grow lots of little roots.
- i) Start scratching all over—insects and fungi attack you. Oh no! Trees can get sick too. Unwanted pests like insects and fungi can harm trees.
- j) Sway slowly then more and more—the tree is blowing in the wind and a storm moves through. Luckily, you have a strong root system and you remain standing.
- k) Make a loud noise (ccrraaaccckkkkk!)—you get hit by lightning and loose a tree limb.

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- l) Smile and sigh (ahhhh!)—you become a home for wildlife in your old age. Several species of wildlife call trees “home”!
- m) Make a hammering noise (knock, knock, knock)—there’s a woodpecker! He is using his beak to peck into your dead wood.
- n) Make a creaking sound and fall down—you blow down in a storm. The tree’s bark is brittle and dead.
- o) Stick up one arm—a new seed sprouts from your rotting wood. The whole process can start over again with a new seed!

5. Ask Follow-Up Questions and Make the Connection to Agriculture.

- What changes happened for the tree?
The trees began as little seeds. The seeds germinate, grow roots, and grow branches and leaves. The leaves give the tree food through a process called photosynthesis where the leaves use light to convert water and carbon dioxide to sugars (the plant’s food!). The tree goes through many changes because of storms, pests, habitat changes—several environmental factors influence trees!
- What purpose do trees serve?
Trees serve several purposes- clean air, provide oxygen, gives shade, prevent soil erosion, provide habitats for wildlife, provide materials for shelter for humans, gives us something nice to look at and several other things! Trees are essential!
- Why is it important to care for trees and plant new trees?
Trees are vital for humans and animals. They provide many needs for living things—habitat, food, absorption of carbon dioxide, and release of oxygen. Trees are also materials for tools and shelter. The industries of forestry and forest farming provide careers to ensure that trees continue to be maintained and planted to benefit us all!

Optional activity extension

- An extension would be to take the students on a walk and try to find trees at various stages of their lives.
- Find more resources at: Dr. Arbor Talks Trees <http://urbanext.illinois.edu/tree3/01.html>