



Lesson Plan for Grades 1 and 2 for Trip to LCCC Arboretum

Objectives

- Students will identify and describe tree parts and their functions (3.1 1.A.5)
- Students will categorize living things by external characteristics (3.1 1.A.1)
- Students will explain how different parts of a tree work together to make the organism function (3.1 2.A.5)
- Explain that trees can only survive if their needs are being met (3.1 2.C.2)

Essential Questions

- What are similarities and differences between deciduous and coniferous trees?
- What do trees need to survive?
- What are the parts of trees and their functions?

Vocabulary

- Deciduous trees: Leaves fall off in the fall and new leaves are produced each spring
- Coniferous trees: Needles instead of leaves, seeds are protected in pinecones, keeps needles year round
- Roots: Usually grow underground, secures the tree in place, take in water and food, and store food, stores food manufactured by leaves
- Trunk: Main stem of the tree, has bark on it, branches grow out of the trunk
- Bark: Looks different on different trees. It is on the trunk of the tree. The inner layer contains phloem which carries the food that is made in the leaves to the other parts of the tree.
- Branches: Branches that grow off of the trunk of the tree are bigger and called boughs. Smaller branches are called twigs.
- Leaves: Are different shapes on each type of tree. Leaves help the tree absorb sunlight and make its food.

Materials

- Activity Sheets (see the LCCC Arboretum website)
 - Activity: Sorting Nature
 - Activity: Investigating Nature with Tools
 - Activity: Studying Your Tree
 - Activity: Parts of Trees Identification
 - Activity: Nature Scavenger Hunt
 - Activity: Deciduous Trees vs. Conifers
 - Activity: Tree Bark Exploration
- Magnifying glasses; clipboards; colored pencils; paper bags for collecting found nature (from the ground); binoculars; cameras; paper and string and crayons for bark rubbing; baskets or boxes for classifying found materials; tool kits for investigation of found nature: eye droppers and water, plastic knives, tweezers and tongs, children's scissors, paper fans to experiment with movement
- Activity- Steps and Procedures
 1. Watch some of the videos about trees on the LCCC Arboretum webpage
 2. Select some of the Activity Sheets to use on your visit to the LCCC Arboretum
 3. Allow the children to explore the environment with their tools and activity sheets
 4. Meet at the LCCC Arboretum outdoor classroom to complete the activity sheets and explore any found materials that were collected (nature materials are on the ground)
 5. Follow-up the visit with other lessons related to the study of trees

Related Materials & Resources

- Resources for Studying Trees for Elementary School Before or After a Visit to the LCCC Arboretum (attached)

Formative Assessment

- Classroom discussion
- Keys for some Activity Sheets



Resources for Studying Trees for Elementary School Before or After a Visit to the LCCC Arboretum

<https://www.arboday.org/kids/>

<https://www.neefusa.org/nature/land/tree-toolkit>

<https://ecosystems.psu.edu/outreach/youth/sftrc/lesson-plans/forestry/k-5/terminology>

<https://www.arboday.org/trees/treeguide/anatomy.cfm>

<https://discovertheforest.org/activities>

<https://arboretum.harvard.edu/wp-content/uploads/2020/07/Caring-for-the-Arboretum.pdf>

<https://ecosystems.psu.edu/outreach/youth/sftrc/lesson-plans/forestry/k-5>

<https://www.plt.org/stem-strategies/tree-lifecycle/>

<https://ecosystems.psu.edu/outreach/youth/sftrc/lesson-plans/forestry/k-5/all-about-trees>

<https://arboretum.harvard.edu/wp-content/uploads/2020/07/whycutatree-web-book.pdf>

<https://arboretum.harvard.edu/wp-content/uploads/2020/07/Tree-Bark.pdf>

https://www.plt.org/stuff/contentmgr/files/1/7d107c9eeff935991a82355fb8f22640/files/plt_lorax_activities.pdf

<https://brainmass.com/education/extracurricular-activities/elementary-interdisciplinary-tree-unit-582023>

<https://www.morrisarboretum.org/pdf/your-guide-to-tree-adventure.pdf?pdf=Tree-Adventure-Tour>

<https://www.prodigygame.com/main-en/blog/earth-day-activities-for-kids/?msclkid=d548c049c6f411eca09ab26622effc51>

<https://www.brighthubeducation.com/lesson-plans-grades-3-5/52795-deciduous-and-coniferous-trees/>

<https://www.pinterest.co.uk/pin/212935888619353073/>

<https://www.flickr.com/photos/azshoppist/6691443733/>

<https://arboretum.harvard.edu/wp-content/uploads/2020/07/Color-In-Nature-Hunt.pdf>

<https://ecosystems.psu.edu/outreach/youth/sftrc/lesson-plans/forestry/k-5/giving-tree>

<https://www.neefusa.org/file/954/download?token=RG8fEsSz>

<https://www.pinterest.com/pin/251568329175970178/>

<https://www.littlefloweryoga.com/blog/movement-activity-seed-to-forest-of-trees/>

<https://www.discoverwildlife.com/how-to/make-things/how-to-make-a-bark-rubbing/>

