



Lesson Plan for Pre-Kindergarten and Kindergarten for a Fieldtrip to LCCC Arboretum

Objectives/standards

- Students will recognize the difference between living and non-living things (3.1 K.A.1)
- Students will recognize that trees grow and change (3.1 PK.A. 3)
- Students will categorize living trees (3.1 PK.A.2)

Essential Questions

- What are similarities and differences in trees and their leaves?
- What colors and shapes are the leaves?
- What is the difference between things that are living and not living?
- Can you point to the parts of the trees?

Vocabulary

- 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.
- Living and non-living things

Materials:

- Activity Sheets (see the LCCC Arboretum website)
 - Activity- Leaves
 - Activity- Sorting Nature
 - Activity- Investigating Nature with Tools
 - Activity- Living and Non-living Things
 - Activity- Color Hunt
 - Activity- Texture Hunt

- 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

- Trees Curriculum Unit Ideas for Pre-K and Kindergarten: Photographs of LCCC ECE interns' authentic experiences in preschool and kindergarten classrooms (LCCC Arboretum website)
- Resources for Studying Trees for Pre-K and Kindergarten Before or After a Visit to the LCCC Arboretum (attached)



Resources for Preschool or Kindergarten to Study Trees Before or After a Visit to the Lehigh Carbon Community College Arboretum

Science

Chlorophyll exploration

<https://www.pinterest.com/pin/3870349670433435/>

Active lesson to identify real trees

[Tree Identification Scavenger Hunt Game for Kids - Edventures with Kids
\(kcedventures.com\)](http://kcedventures.com)

Make the Arboretum or a neighborhood tree guide

<https://kidworldcitizen.org/make-a-neighborhood-tree-guide/>

Life cycle, germination, and journals

<https://aroundthekampfire.com/2018/03/plant-life-cycle-activities-for-kids-the-fun-way.html?pp=1>

Bark Identification and books about trees

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

<https://www.thepeacefulpreschool.com/blog/learning-about-trees-a-guest-post>

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

Pine cone weather station

<https://www.science-sparks.com/pine-cone-weather-station/>

Exploring pine needles and evergreens

<https://www.fantasticfunandlearning.com/playing-with-pine-needles.html>

<https://www.pinterest.com/pin/355151120608868421/>

How do leaves change by season?

<https://www.bing.com/videos/search?q=tree+changes+by+season+for+kids&&view=detail&mid=303AD07DA2E01CA0D48A303AD07DA2E01CA0D48A&&FORM=VDRVRV>

Living and non-living things

<https://arboretum.harvard.edu/wp-content/uploads/2020/07/Living-and-NonLiving.pdf>

Exploring leaves on a light table

<https://pin.it/yf6rkt4>

Art

Make paintbrushes out of pine boughs

<https://www.pinterest.com/pin/140806228261794/>

Real branches and loose parts

<https://pin.it/6XFJp21>

Painting on real branches

<https://pin.it/45fZsG2>

Painting real branches to represent changing seasons

<https://www.pinterest.com/pin/161144492890599586/>

Twig and yarn art

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

Painting tree bark

<https://preschooltoolkit.com/blog/preschool-nature-study-tree-craft/>

Leaf rubbing collages

<https://mamapapabubba.com/2014/09/29/leaf-rubbing-collages/>

Playdough Imprints

<https://www.fantasticfunandlearning.com/spring-tree-play-dough-invitation.html>

Math

Leaf rubbing on graph paper

<https://preschoolsteam.com/textured-leaf-rubbings-preschool-science/>

Math with acorns

<https://pin.it/2283HLW>

Classifying and sorting types of trees

<https://inspirationlaboratories.com/sorting-leaves-seeds-and-celebrating-autumn/>

Literature and Literacy and Language

Pine needle letter writing bin

<https://littlepinelearners.com/pine-needle-sensory-writing-tray/>

Children's story books about trees

<https://www.fantasticfunandlearning.com/books-about-trees.html>

<https://whereimaginationgrows.com/childrens-books-preschool-trees/>

Alphabet

<https://growingbookbybook.com/learning-the-alphabet/>

Songs

<https://growingbookbybook.com/preschool-songs-tree-farm/>



Additional Websites for Preschool and Kindergarten to Study Trees

Video of a project approach/investigation of trees from Eastern Connecticut State University

<https://www.easternct.edu/center-for-early-childhood-education/investigating/trees.html>

Videos about Trees

<https://arboretum.harvard.edu/educators/virtual-learning/>

Video of the difference between deciduous and conifers

<https://www.bing.com/videos/search?q=vocabulary+about+trees&docid=608004031822522977&mid=AEACF7608442C5C044B5AEACF7608442C5C044B5&view=detail&FORM=VIRE>

LCCC Pinterest boards related to trees

<https://www.pinterest.com/mwursta/project-tree/>

<https://www.pinterest.com/lcccteachered/project-approach/project-study-the-giving-tree/>

Philosophy of incorporating nature into the classroom and outdoor experiences

<https://www.naeyc.org/resources/topics/nature?msclkid=a25094d2c6f211ec85c3717d87dcb1bf>

<https://www.naeyc.org/our-work/families/turn-any-walk-nature-walk>

<https://www.naeyc.org/resources/blog/10-tips-nature-classroom?msclkid=c1143fb9c6f211ecaef1e387481b2f95>

<https://www.naeyc.org/our-work/families/where-can-we-explore-nature-everywhere?msclkid=c11413d8c6f211ec9abbf758705b9a1e>

<https://www.naeyc.org/our-work/families/time-outside-can-improve-readiness-learn>

Multiple science, math, art, cooking and sensory lessons

https://www.edutopia.org/article/7-ways-connect-young-students-nature?utm_content=linkpos1&utm_medium=email&utm_campaign=weekly-2022-03-03&utm_source=edu-newsletter

<https://www.kcedventures.com/blog/nature-activities-for-kids-trees-animal-habitats>

<https://www.prekinders.com/tree-life-cycle/>

<https://www.prekprintablefun.com/fall-leaves-and-trees-planning-page.html>

<https://www.preschool-plan-it.com/arbor-day.html>

<https://www.brighthubeducation.com/preschool-crafts-activities/65864-teach-about-trees-with-these-arbor-day-activities/>