# Tree-mendous Trees Program <br> Pre- and Post-Activities (K-5) 

## ACTIVITIES

## Decorate a Tree Cookie (K-2)

## Curriculum Connections: Science, Art

Required Materials: tree cookie, crayons, markers, or colored pencils; optional: glitter, feathers, beads, glue, small magnets, yarn
Description: Use craft materials to decorate a tree cookie on both sides. Attach a magnet to the back and hang on refrigerator, or use yarn to hang the tree cookie from a doorknob.

Extension/Modification: Look outside or take a short walk to collect natural materials, such as fallen leaves and bark to decorate the tree cookie.

## Create Tree Labels (K-2)

## Curriculum Connections: Science, Art

Required Materials: popsicle sticks, colored pencils, markers, or crayons, tree identification field guide of your choice or iNaturalist /Seek app

Description: Discuss how to use the tree identification field guide. Use the field guide to identify a tree in the yard. Write the name of the tree on a popsicle stick. Place the stick in the ground near the tree. Continue until all the trees in the yard have been labeled.

Extension/Modification: Record the differences in the trees as the seasons change. Which trees lose their leaves first? Which trees stay green all year? Identify the differences between deciduous and coniferous trees.

## Create Your Own Leaf Book (K-5)

## Curriculum Connections: Science, Art, Technology

Required Materials: construction paper, pencil, glue, Q-tips, stapler, various leaves, tree identification field guide of your choice or iNaturalist/Seek app

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Description: Take a walk outside and collect leaves from various trees. Be sure the leaves are not too brittle. Use the Q-tip to glue one leaf onto a piece of construction paper. Identify the leaf with the field guide or app. Label the page with the tree name. Set aside to dry. Once dry, place the pages together. Staple the left edges to create a leaf collection book.

Extension/Modification: Look outside or take a short walk to look at trees and determine what season they are in. Use natural materials, such as fallen leaves and bark from outside to make more of a collage-type artwork.

## Seed Sleuth (K-5)

Curriculum Connections: Science, Math, Technology
Required Materials: tree field guide or iNaturalist/Seek app, assortment of types of seeds, cardstock paper, pencil

Description: Discuss types of tree seeds and their dispersal methods. Then, go on a scavenger hunt around the school for various tree seeds and record what you find. Use identifiers such as nuts, berries/fruits, cones, and samaras.

Extension/Modification Activity: Show how seed dispersal works using a selection of samaras, fruits, cones, and nuts. Experiment and record how long it takes for each one to fall from a certain height, how well each float, and how each taste. Use known and edible fruits/nuts; choose a few students without any nut allergies to taste test.

## Adopt-A-Tree (3-5)

## Curriculum Connections: Science

Required Materials: calendar, pencil, photos of trees
Description: Discuss the seasonality of our climate. Discuss the difference between evergreen and deciduous trees, especially in the winter. Look at pictures of trees during each season and have students guess which seasons the trees are in. Walk outside and choose one tree to monitor for a year. Use a calendar to record observations periodically. Be sure to note changes in the leaves, blooms, wildlife in and around the tree, and the weather.

Extension/Modification: After two or more seasons have passed, compare observations. Research the type of tree being observed. Write a story about the life of the tree over the past year.

## Trees in all Seasons (3-5)

## Curriculum Connections: Science, Art

Required Materials: construction paper, glue, crayons, markers, or colored pencils, photos of trees; optional: natural materials

Description: Discuss the seasonality of our climate. Discuss the difference between evergreen and deciduous trees, especially in the winter. Look at pictures of trees during each season and have students guess which seasons the trees are in. Have each student cut out and draw/create a tree in each of the four seasons. Winter trees are bare and without leaves. Spring trees have leaves and flowers. Summer trees have green leaves. Fall trees have colorful leaves.

Extension/Modification: Look outside or take a short walk to look at trees and determine what season they are in. Use natural materials, such as fallen leaves and bark from outside to make more of a collage-type artwork.

## Tree Product Inventory (3-5)

## Curriculum Connections: Science

Required Materials: computer, paper, pencil
Description: Have the students consider the number of tree products they use in their everyday lives. Begin by researching different tree products that are used in the production of common consumer items, and make a list of these tree products to use as a reference during this activity. As a class, create an inventory of all products in the classroom that are made from tree products. Next, think about all the tree products in the entire school and add any new ones to your list. Instruct students to make their own inventory of tree products in their homes. In class, discuss the different lists. Tally up the number of unique tree-related products your students use at school and at home. Explain that humans rely on trees for many things, and that we need them to survive.

Extension / Modification Activity: After reflecting on the number of tree products used every day, students can develop a plan to decrease the number of tree products they use at home and at school.

## Tree Stories (3-5)

Curriculum Connections: Science, Language Arts
Required Materials: paper, pencil
Description: Encourage your students to develop their skills as writers and tree-lovers with these three writing activities. Choose the most grade-appropriate prompt for your students.

Prompt 1: My Favorite Tree

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- Write a poem or story describing your favorite tree. What do you like about your tree? What does it look like? How does it feel? What do you like to do with your tree?

Prompt 2: Me? A Tree?

- Imagine that you are a tree. Write a short story or poem from the point of view of a tree.

Prompt 3: A World without Trees

- Sometime in the future, it is possible that the Earth may run out of trees due to the current rate of deforestation and human consumption. Let your imagination travel to that time in the future. What is the world like without trees? How is the weather? What do people eat? What do people no longer have now that there are no trees? In a short story, write about this futuristic Earth with no trees.

Extension / Modification Activity: Using the same prompts, encourage students to create a short play to perform for their classmates.

## Tree Measurement Activity (3-5)

## Curriculum Connections: Science, Math

Required Materials: ruler or measuring tape, string, scissors, paper, pencil
Description: Have students select one tree on the school's property to measure. Explain to students that most trees are too tall to just measure with a ruler or measuring tape and that many strategies have been developed to determine tree height. Have students first estimate the height and girth (circumference) of the tree trunk. After students estimate these values, model how to accurately measure the height and girth of a tree. Have students measure their tree and record their answers. After measuring the tree, students should compare their estimate to their measured height and girth.

## Estimate Height

- Have one student in the class stand next to a tree to compare their heights.
- Ask students to estimate how many of that student would equal the height of the tree.
- Based on the student's actual height, estimate the height of the tree.

Estimate Girth

- Have students stretch their arms around the tree and explain that the circumference of the tree is equal to its girth.
- Ask students to estimate the girth of the tree based on their interaction and observations.

Measuring Tree Height

- Have Student A and Student B stand next to the tree.
- Ask Student B to hold a pencil vertically an arms-length in front of them and move backwards away from the tree until the pencil height equals the tree height.
- Without moving, Student B should flip the pencil horizontally, lining the one end of the pencil up with the tree trunk.
- Student A should now walk away from the tree at a $90^{\circ}$ angle from Student B.
- Student B should yell "stop" when it appears Student A has reached the other end of the pencil. The distance between Student A and the tree should now appear to equal the length of the pencil.


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- Have students use a ruler or tape measurer to measure the distance between the Student A and the tree. This distance will equal the height of the tree.
Measuring Tree Girth
- Have students wrap a string around the tree at their underarm height.
- Students should cut the string with a pair of scissors where the two ends meet.
- Have students measure the length of their string using a ruler or measuring tape to determine the girth of the tree.

Extension / Modification Activity: Have students research other methods of measuring tree height. Encourage students to go outside and measure the same tree using the new method. Students can compare their results using several different measurements methods, and determine which is most accurate.

## Attract Wildlife to a Tree (3-5)

Curriculum Connections: Science, Technology
Required materials: bird feeder, bird seed, bird and tree identification field guide of your choice or iNaturalist/Seek app, paper, pencil

Description: Discuss the ways in which birds use trees, like for shelter and food. Inform students that they can make trees more inviting by placing a bird feeder on a tree. Choose a tree to place a bird feeder filled with seeds; even better if you can see the tree from your classroom window. The students can identify the tree using a field guide or the iNaturalist app. Have students monitor the tree for visiting birds and record the number of birds they see. Students can also use a field guide or app to identify the bird species visiting the feeder. Have students record the different species they see.

Extension / Modification Activity: Put one bird feeder on a deciduous tree and one on a coniferous tree. Have students record the types birds that visit each tree and see if there are any differences in the species that visit the different types of trees.

## WEB RESOURCES FOR TEACHERS AND STUDENTS

## Project Learning Tree <br> www.plt.org

Arbor Day Foundation
www.arborday.org

## LONGWOOD <br> GARDENS

## SUGGESTED PRINT RESOURCES FOR STUDENTS

Anthony, Joseph, illustrated by Cris Arbo. In a Nutshell. Nevada City, CA: Dawn Publications, 1999. Print. Ingoglia, Gina, The Tree Book for Kids and Their Grown-ups. Brooklyn, NY: Brooklyn Botanic Garden, Inc., 2008, 2013. Print.

Burns, Diane L., illustrated by Linda Garrow. Trees, Leaves and Bark. Minnetonka, MN: NorthWord Books for Young Readers, 1995. Print.

Burnie, David. Eyewitness Trees. New York, NY: DK Publishing, 1988, 2005. Print

