

Project Learning Tree

The following lesson plans are arranged by topic. They are derived from the Project Learning Tree Environmental Education Activity Guide. Appropriate grade levels are listed below each description, but please email a request to our educator at teddi-stark@juniataccd.org if you teach another grade level or have group of students varying in age, but have interest in an activity that is listed for other grade levels in order to discuss adaptation options for that lesson. Each lesson will take approximately 30-60 minutes unless otherwise stated.

Diversity

Get in Touch

Students learn to use their sense of touch to explore the environment around them, identify and learn about the different parts of a tree, and to understand how other creatures might use their sense of touch to find their way around the forest. (Adaptable for Grades K-5, outdoor component)

Peppermint Beetle

Students learn how many animals rely on their sense of smell and different scents to look for food, find their home, or look for a mate. Students will see if they can use their sense of smell to follow the trail of the imaginary “peppermint beetle” to see where he was going, and why. (Adaptable for Grades K-3, outdoor component optional)

Poet Tree

Students will discuss the benefits of trees and forests and make a class list (on a blackboard or whiteboard) of characteristics and attributes of trees/forests. Then, students will go outside and observe a tree or a group of trees near their school or in a nearby natural area, and they will write down descriptive words about the tree(s) look, smell, sound, and so on. Back in the classroom, students will use this list of observations and the class list to write a “Windspark” poem about trees or forests. They will then be given the opportunity to share the poem with the class if they would like. Poems will be collected and made into a booklet by JCCD staff and copied for each member of the class, then mailed or hand-delivered back to the school for students to take home and keep. (Adaptable for Grades K-5, outdoor component optional)

Interrelationships

Birds and Worms

Students will learn about predators, prey & camouflage in this lesson through examining pictures of both predators and prey. Students will discuss how camouflage helps prey hide from predators, and how it helps predators sneak up on prey. They will then hunt their own “prey” in an (preferably outdoor) area and see if camouflage has any impact on what they catch. (Adaptable for grades K-3, outdoor component optional)

Every Tree for Itself

Students will learn about how trees grow, what trees need to grow healthily, forest management, and competition. Students will play games and examine tree “slices” or cross-sections to enforce these concepts. (Adaptable for Grades 2-5)

Pollution Search

Students will learn what pollution is, about different types of pollution, and what causes pollution. Then, they will take a walk around their school and school grounds to see if they can identify any pollution. Upon returning to the classroom, the class will make a list of the types of pollution we found outside, and discuss what could be done to clean up that pollution, and to prevent it from happening further. (Adaptable for grades K-3, outdoor component)

Systems

Have Seeds, Will Travel

Students will learn about and discuss how plants use seeds to reproduce, and the different ways in which seeds are dispersed. Students will venture outside to see what kinds of seeds they can collect, and bring the seeds back to the classroom to sort and examine. (Adaptable for grades K-5, outdoor component)

Water Wonders

Students will learn about the water cycle and all the places on Earth and in the atmosphere that water can be found. Students will then participate in an activity where they follow drops of water through the water cycle, and create a Water Cycle Bracelet that symbolizes their journey and reminds them of where they've been. (Adaptable for grades 2-5)

Web of Life

Students will learn about a local forest ecosystem and the animals and plants that might live there. Each student will be given an organism to represent and learn about all organisms' places in the food web or food chain. Students will then participate in a game to find out how all things living in the forest (and everywhere on earth) are connected. (Adaptable for Grades 2-5)

Schoolyard Safari

Students will discuss what it means to go on a Safari. They will then talk about going on a different kind of Safari, right in their own (school's) backyard! As a class, students will list what kind of animals they might see on a Safari in the school yard, or what signs of animals they might come across. In pairs or small groups, students will be lead on a walk around the school grounds to look for signs of wildlife and sketch/make a list of their findings. As a class, students will discuss why these animals live near or visit the school grounds, what the need to survive, and whether they are harmful or helpful to the students and the school. (Adaptable for grades K-5, outdoor component)

Structure and Scale

Tree Factory

Students will learn about all the parts that make up a tree and help it grow, including the leaves, braches, roots, bark, xylem and phloem. Students will then be assigned a part of the tree to act out, and will work together as a class to “build” a human tree and act out their specific parts to bring the tree to life. Students will realize trees are doing a lot more than just standing silently in the woods. (Adaptable for grades 2-5, outdoor component optional.)

Looking at Leaves

Students will collect leaves from an outdoor area, and learn about the purpose of leaves. They will discuss different types and varieties of leaves, and sort them according to shape, size, color, etc. They will then return outside and figure out which tree each leaf came from, and identify those trees. Students will then make a leaf print or leaf rubbing of their leaves and label the type of leaf it is. (Adaptable for grades K-2, outdoor component)

Name That Tree

Students will learn about the different methods used to identify and distinguish different species of trees, and how we can use those clues to identify trees ourselves. They will then go on a “scavenger hunt” using clues provided to find several different types of trees around their school area and identify them. (Adaptable for grades 3-5, outdoor component)

Soil Stories

Students will learn that there are different types of soil. They will learn how certain plants and animals rely on different types of soil for survival. They will then analyze soil samples from around their communities to see how the soil types differ from one another, and talk about what types of plants and animals they might find in an area that has the soil types of the samples they analyzed, and what that area might look like. (Adaptable for grades 3-5, outdoor component optional)

Patterns of Change

Signs of Fall

Students will learn why leaves change colors in the fall, then venture outside to observe signs of fall and collect leaves that are still green. Students will then bring the leaves back to the classroom and conduct an experiment to see all of the colors besides green that are contained in leaves all year round. (Adaptable for grades K-5, outdoor component optional)

Life on the Edge

Students will learn about habitat requirements, adaptation, endangered species, and how habitat destruction is threatening many species with extinction. They will play a game to reinforce the ideas that many species need special habitats to survive, and without those habitats they will struggle to survive unless they can adapt. (Adaptable for grades 2-5)