



Environmental Education Activities to Do at Home from Virginia Department of Forestry and Project Learning Tree

Twig Shapes (PLT)

Go outside and collect a bag full of sticks from the ground around trees and shrubs. Break the sticks into pieces from 3 – 6”.

Either stay outside or come inside and create designs or pictures made from the sticks. Early childhood children can be challenged to create different shapes (square, triangle, rectangle, etc.) If you stay outside other objects such as leaves, nuts and seeds, and flowers can be drawn into the design. If you have enough space they can add to the picture each day!

Bursting Buds (PLT)

Materials: a nature journal (any blank paper can be made into a journal) and writing utensil

In the spring, the trees and shrubs develop new leaves. Where do these new leaves come from? (buds) When are the buds formed? (usually the previous summer!)

Go outside and find branches that can easily be reached. The buds on the trees will be bigger than the buds on shrubs. Examine the end of the branch. Notice the bark pattern, leaf scars, buds, terminal buds, and any thorns. Use your pocket knife or fingernail to split a bud open and look at the tiny new leaves tucked inside.

Your children can sketch the different branch tips, the shape of the buds, and what they saw inside the bud. They could do one tree or shrub each day throughout the week (s) and have a very nice bud study in their nature journal.

Adopt a Tree (PLT)

Materials: a nature journal (any blank paper can be made into a journal) and writing utensil, crayons

Go outside and find one tree that each child would like to adopt during their stay at home.

Draw a front cover. My Adopt-a-Tree Journal.

Page one: Make a sketch of your tree. Draw the shape of its trunk, branches, and canopy (treetop). Identify the tree. Here's a pdf of our online Tree ID Guide with a simple key in the front. <http://www.dof.virginia.gov/edu/resources-educators.htm>

Page two: Make a bark rubbing of your tree. How does the bark feel? How does it smell?

Page three: Draw a picture of a leaf from your tree, or make a leaf rubbing.

How does the leaf smell? How does it feel? (leaves not out right now, but could be added when they arrive)

Page four: Does your tree have any fruits, nuts, or seeds that help identify it?

Sketch what you find.

Page five: Where is your tree? Draw a map to show its location.

Page six: Investigate the health of your tree. Is it alive? How can you tell? Is it healthy? In what ways are people helping or hurting it?

Page seven: Write 10 words to describe your tree.

Page eight: Are any animals on or near your tree? Don't forget to look for insects, spiders, and other small animals. If you have them, use binoculars or magnifiers for a closer look. Or zoom your camera in as close as you can.

Are there any signs that animals have used your tree in the past? Look for holes, nests, trails, and other animal signs and describe what you see.

Page nine: Each time you visit your tree, describe any changes you notice since the last visit. Journal the seasonal changes in your tree. When did the tree flower? What do the flowers look like? What day did the leaf buds form on the branches? When do the fruits or seedpods ripen? Make note of anything else you observe.

The Shape of Things (PLT)

Go for a walk and look for shapes in nature. Where do you see circles? Triangles? Rectangles? Rhombus? How about a star? (flowers are often in the shape of a star)

If you're keeping a nature journal you can have the children sketch the natural object and draw the shape they see in bright red.

Sunlight and Shades of Green (PLT)

Why do plants need sunlight? (Photosynthesis to make food for the plant) What part of the plant collects the sunlight? (the leaves) What do you think would happen if the leaves received no sunlight?

Cut out circles or squares of cardboard just large enough to cover a good portion of a chosen leaf or leaves. Go outside and attach the circle or square to the chosen leaves (paperclip, tape).

After four days remove the cardboard and observe. What do they notice? (there should be a lighter area that was covered by the cardboard. When sunlight was blocked, the leaf stopped producing the chlorophyll needed for photosynthesis)

Have Seeds Will Travel (PLT)

Materials: a nature journal (any blank paper can be made into a journal) and writing utensil

How do plants create new plants? (seeds) Since a plant can't move like an animal, how do the seeds get to a new location to grow? (floats on air, flies through the air, floats on water, bounces or rolls, eaten by animals and deposited elsewhere, stored by animals and forgotten, sticks to animals, thrown from the plant, or released and opened by fire)

Go for a walk. How many different types of seeds can be found? How do you think that seed travels? In the nature journal, draw sketches of the different seeds found.

Depending on age, the child can research information on seeds of favorite trees and other plants found on the walk. That information could be added to the nature journal.

STEM Challenge

Materials: a variety of materials found around the home i.e. cardboard, bubble wrap, toothpicks, craft sticks, construction paper, playdough, pipe cleaners, wire, craft foam sheets, feathers, coffee filter, tissue paper, and so on. What can you find?!

1. Design a seed that can be **thrown** a least 5 feet away from its parent plant.

Instructions:

Using the assorted materials provided, you will construct your very own "designer seed"! Design it in such a way that it has some specialized dispersal mechanism to throw the seed away from its parent plant. This mechanism is not to be your hand and arm!

**Remember, your seed should be thrown at least 5 feet from the parent plant.

2. Design a seed that **floats on water** for at least 5 minutes.

Instructions:

Using the assorted materials provided, you will construct your very own "designer seed"! Design it in such a way that it has the ability to float some distance away from its parent plant.

**Remember, your seed needs to be able to float at least 5 minutes.

3. Design a seed that **sticks to an animal** and can be carried at least 10 feet.

Instructions:

Using the assorted materials provided, you will construct your very own "designer seed"! Design it in such a way that it has some specialized feature so that it can stick to an animal and be carried a distance away from its parent plant.

**Remember, your seed should be able to stick to an animal and can be carried at least 10 feet.

4. Design a seed that **floats in the air** for at least 5 feet.

Instructions:

Using the assorted materials provided, you will construct your very own "designer seed"! Design it in such a way that it can successfully float in the air away from its parent plant. You may use the fan to help this process.

** Remember, your seed should be able to float in the air for at least 5 feet.

5. Design a seed that an animal unknowingly **ingests**, then deposits later a distance away from the parent plant.

Instructions:

Using the assorted materials provided, you will construct your very own “designer seed”! Design it in such a way that it is attractive to an animal through color and scent who then ingests it and carries it away from the parent plant and deposits it.

** Remember, your seed should be able to be ingested by an animal then later deposited without damage to the seed. (This is pretend! Don’t leave outside for an animal. How should the seed look and smell to attract an animal?)

From National Project Learning Tree

<https://www.plt.org/educator-tips/activities-to-do-with-children-at-home>

Forest Facts and Crossword Puzzles (VDOF)

- [How A Tree Grows](#) | [puzzle](#)
- [Identifying Trees](#) | [puzzle](#)
- [Why We Need Trees](#) | [puzzle](#)
- [Trees and Wildlife](#) | [puzzle](#)
- [Trees Protect Water](#) | [puzzle](#)
- [Forestry in Virginia](#) | [puzzle](#)
- [Virginia In The Fall](#) | [puzzle](#)
- [Virginia's Alien Invaders](#) | [puzzle](#)

Let’s Learn About Trees Coloring Book (VDOF)

http://www.dof.virginia.gov/infopubs/Lets-learn-about-trees-coloring-book_pub.pdf

Match the Color (VDOF)

If you can get to a store that has paint chips this is a fun activity. At the store get chips of many different greens, browns, greys, and all different colors that spring flowers may come in.

Go outside for a walk with your paint chips. Pick a plant (tree, shrub, weed, grass, and so on) and see if you can find the paint chip that matches the color of the bark, the bud, the flower, etc. You might want to take pictures of the paint chip with the plant and create a journal of all the different colors you find in our great world.