



Activity:

Every Tree For Itself

A Project Learning Tree Activity

Goal:

To understand that trees, like all living things, have to have sunlight, water, & nutrients to live.

Extensions for Upper Grades:

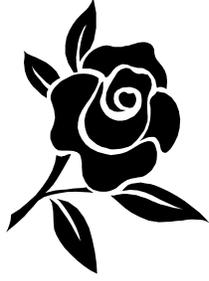
Add the use of the red squares to show pesticides in the ground water. Too many pesticides could kill a tree.

Have students keep a record of the squares they collected over the course of three or four rounds and have them graph what happened to their tree.

Directions:

Materials needed for this activity are the colored foam squares in labeled ziploc bags in the pack.

- 1) Tell the students to imagine that they are trees and have them stand about 3 feet apart. Scatter the green, blue, and yellow squares on the ground around the “trees”.
- 2) Explain that each square represents one of the things that a tree needs to live. **Green – nutrients, Blue – water, Yellow – sunlight.**
- 3) Keeping 1 foot in place tell the students to gather as many squares as possible in a 30 second. Give students a signal to begin gathering their requirements to live as a tree.
- 4) Ask what students picked up.
- 5) Do any trees lack a particular requirement?
- 6) What might happen to a real tree that lacked one of its requirements? (It might grow slowly or eventually die. Point out to the students that different species of trees have different requirements.)
- 7) Is there such a thing as too much water, sunlight, or nutrients? (Yes, every species has optimum levels beyond which the tree becomes stressed.)
- 8) Ask the students what happened to them as “trees”.



Activity: Herb Garden Scratch & Sniff Scavenger Hunt

Goal:

Use your senses to develop observation skills.

Extensions for Upper Grades:

Have students independently find plants that match the given descriptions.

Directions:

The herb Garden is located across from the parking lot.

- 1) You may do the activity as a group or let each student use their own copy of the hunt.
- 2) Have the children use their observation skills to match the plants to the correct description.
- 3) Use the pens from the pack to mark off each block as you find them.
- 4) After finishing the activity wipe off the scavenger hunt worksheets with the enclosed wipes.

Scavenger Hunt Answer Key on Back



Activity: Tree Cookies

This is a *Project Learning Tree* Activity

Goal:

To recognize that trees have a life cycle like humans do.

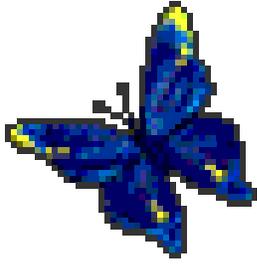
Extensions for Upper Grades:

- 1) Find a fallen tree.
- 2) Determine the age of the tree.
- 3) Using group observations tell the life story of the tree.

Directions:

Let each of the students examine the tree cookie in the pack.

- 1) Explain that each ring on the tree cookie represents a year of growth.
- 2) Have the students count the growth rings and report how old the tree was when it was cut down.
- 3) Give each student a paper plate and crayons and have them draw their own tree cookie.
- 4) Each student's cookie should have a ring for each year of the child's life.
- 5) Students may choose to show important events in their life by representing them on their cookie (i.e. I broke my arm when I was 3).
- 6) Your group may like to share their cookies with each other.
- 7) At the end of the Native Plant Trail there is an excellent example of a fallen "tree Cookie"



Activity:

Pollination Parade

This is a Project Seasons Activity

Goal:

To understand that insects, wind, and water act as pollinators for plants

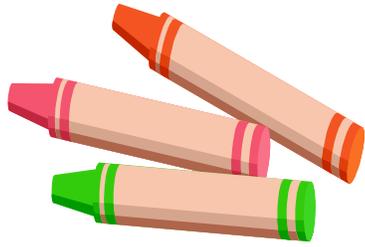
For Younger Grades:

This activity may be too difficult for some of the younger grades. Have them take time observing a particular blossom to see what kind of pollinator visits and for how long.

Directions:

We suggest going to the pollination garden for this activity.

- 1) Have the students look over the flower power parts sheet from the pack.
- 2) Explain that each pollinator has a specific flower type that it prefers, but it may visit and pollinate many different types of flowers.
- 3) Split your students into two groups. Give each student from group 1 a **Pollinator Profile Card**. Give each student in group 2 a **Flower Description Card**. (*Project Seasons Handouts*)
- 4) Students should read over their cards.
- 5) Students must now search for their “Pollinator Partner”.
- 6) Have students discuss plant and animal relationships. Why does their “pollinator” prefer certain flowers? Why do some flowers need a specific kind of pollinator?



Activity:

Leaf or Tree Rubbings

Goal:

Use art as a way to explore the natural world

Extensions for Upper Grades:

Have older students make more than one rubbing, identifying the trees. They can then take them home to make a collage of different leaf and bark types.

Directions:

- 1) Students can do a bark rubbing by placing blank paper against a tree trunk and rubbing a crayon length-wise across the paper.
- 2) To do a leaf rubbing have the students pick up a fallen leaf from the ground and place it between the paper and a hard surface (such as a picnic table). Then rub crayon as directed above.
- 3) Ask students not to pick leaves from trees.
- 4) Return fallen leaves to the ground when they have finished.
- 5) Use the Peterson Flash Guides to identify the trees they find.



Story Book: “The Pumpkin Circle”

Goal:

Understanding Life Cycles

Extensions for
Upper Grades:

Can you name other life cycles?
Find examples of different stages of plant and animal life here at the Arboretum.
Animals include insects!

Directions:

- 1) Find a quiet spot hear a Blandy and read this wonderful story.
- 2) Be sure to share the colorful pictures with your students.
- 3) Discuss the Pumpkin Circle with students
 - a. How do plants start?
 - b. What does the plant produce after maturing?
 - c. What happens when the plant dies?



Activity: Hand Lenses

Goal:

Use scientific equipment for observation

Extensions for Upper Grades:

Have students identify specific flower parts from two different live specimens.

Draw and label the specimens. How are they alike and different?

Directions:

- 1) Explain to the students that the hand lenses are pieces of scientific equipment and **not toys**.
- 2) Before handing out the lenses to each student show them the proper way to wear the lenses – with the cord around the neck at **ALL TIMES**.
- 3) Show the students how to use the lenses by holding the lens up to but not touching one eye. Close the other eye. Bring the object they are observing up to the lens rather than moving the lens away from the eye to the object.
- 4) Tell the students to observe flowers and plants they find at the edge of the gardens; this way they will stay on the path or grass and not disturb the gardens.
- 5) Let the students use the lenses to explore their surroundings.
- 6) Give children the chance to look closely at the plants here at Blandy. What do they see? Are there any insects inside the blossoms? Can they see pollen grains? What else do they see?
- 7) Students can use the field guide from the packs to **identify** the plants they have found.
- 8) Children can use paper and crayons provided to draw pictures of what they find.