

Plants People Use

Pre-/Post-Visit Activities



Thank you for registering for the GreenSchool Workshop *Plants People Use*. During this workshop, your students will learn that many of the things we use, wear, and live in are made of plants. The following selection of pre- and post-visit activity ideas and recommended resources is designed to support K–2nd grade classroom integration of the concepts addressed in *Plants People Use*.

PRE-VISIT ACTIVITY IDEAS

Plant Observation and Exploration

Students strengthen observation skills while learning about the basic parts and function of plants.

Materials:

- a sturdy, simple houseplant with a flower (i.e., African violet)
- newspaper or drop cloth

-
- After seating your class on a rug or other common area, have the children carefully pass the plant to each other. Explain that as each one looks at the plant, they are to share an observation. Ask your students to describe what they see as well as what they feel and smell. Remove part or all of the plant from the container so that the children can see and touch the roots.
 - Depending on the age of your students, go over the names and functions of the major plant parts (roots: support plant and obtain water and nutrients from the soil; stem: moves water and food; leaves: food production; flower: reproduction; fruit: protects seeds; seed: beginning of new

plant). Ask students to draw and label the parts of the plant.

Make a Spicy Sachet

Students review the parts of a plant and learn to classify plant parts based upon observations and the use of their five senses.

Materials:

- dried bay leaves, coriander seeds, cinnamon sticks, cloves, and fennel seeds
 - spoon
 - small bowl for each ingredient
 - piece of 4" x 4" fabric or gauze
 - cotton balls
 - ribbon
-
- Group students together into small work groups.
 - Combine the dried ingredients into a bowl and provide each group with a bowl of mixed spices.
 - Review the five senses: sight, sound, touch, taste, and smell.
 - After reviewing the parts of a plant, ask the students to use their senses to investigate their plant materials.
 - Discuss the basic function of each plant part.

- Ask the students to create piles of similar plant materials based upon their observations. For example, they could create a pile based upon scent, color, shape, size, or plant part. *What color is their plant part? How does each plant part smell? Do all plants have a scent? Why do you think a plant would have a scent?*
- Next, discuss the different categories each group used to classify their plant materials.
- Give each student a fabric square. Lay them flat on the table and place one cotton ball in the center of it. Add one to two teaspoons of your sachet ingredients to the center of the fabric square. Cinch the fabric together at the top and twist. Tie with a ribbon to close the top of the sachet.

POST-VISIT ACTIVITY IDEAS

Make a Musical Instrument

Students reinforce the concept of how plants are used as musical instruments and strengthen their ability to compare and contrast different types of seeds.

Materials:

- mailing tubes (alternatively paper towel rolls or small paper bags)
 - crayons
 - ribbon
 - variety of seeds such as dried lima beans, peas, lentils, black beans, sunflower seeds, rice
 - small bowls
-
- Divide your class into groups. Provide each group with a bowl filled with the mixed seeds.
 - As a group, have the students sort their seeds based upon their color/shape/size.
 - Discuss the seeds as a class. *Why does a plant produce seeds? Why are they different colors and shapes? Does that change the function of a seed?* Remind the class that all seeds contain “food,” which is enough to help it grow until it produces leaves to utilize the sun for photosynthesis.
 - Once you have discussed the role of the seed in the plant’s life cycle (it is a means of reproduction for the plant), have the students take a handful of each type of seed and place it inside their mailing tube.
 - Instruct students to put the top cap on their mailing tube.
 - Decorate and personalize the rainsticks by coloring the outside of the tube and tying ribbons on it.
 - Turn the rainstick upside down to listen to the sounds of the tropical rainforest right in your classroom!

- Challenge: *Send your students on a scavenger hunt in their own kitchen cabinets and find as many different seeds as they can to bring in and show the class.*

Dill-icious Dill Pickles

Students deepen their understanding that plants are used for food.

Materials:

- 1-1/3 white vinegar
 - water
 - fresh dill
 - pickling spices (provided in GreenSchool class)
 - pickling salt
 - garlic
 - 6-8 large (pickling) cucumbers
 - cutting board
 - knife
 - measuring teaspoons and cups
 - large bowl
 - 6 empty plastic containers
-
- Explain to your class that they are going to work together to create a food made from plant parts. Briefly review the basic parts of a plant—roots, stem, leaves, flower, fruit, seed. Then show your students the dill and cucumbers, and challenge them to determine what plant parts are represented. Remind them that a *fruit* contains seeds, and cut open one cucumber to see this.
 - The teacher should slice the cucumbers into a large bowl. Add the following mixture to the cucumbers:
 - 4 cups of water
 - 1-1/3 cup white vinegar
 - 1 tablespoon of pickling salt
 - Let this mixture set for 30 minutes, then drain and put brine aside.
 - Divide your class into small groups, distribute an empty jar to each table and guide the children through the following process:

- Add one clove of peeled garlic to the bottom of the container
- Add approximately 8 peppercorns
- Add about one teaspoon of mustard seeds
- Add a sprig of fresh dill
- Fill the container to the rim with sliced cucumbers
- Add another sprig of dill on top of the cucumbers
- Fill the plastic container with the brine solution and put the lid on
- Refrigerate for a minimum of 3 days and enjoy!
- *Brainstorm with your class other foods besides cucumbers that you can pickle! How about carrots, onions, beans? What plant parts are these?*
- Note: Each batch of pickles will taste a little different – depending on how many peppercorns and mustard seeds they use. – Have students try another group’s pickles and compare them to their own batch.

RECOMMENDED TEACHER RESOURCES

Burnie, David. *Plant*. New York: Dorling Kindersley Publishing, 2000. **Dietl**, Ulla. *The Plant and Grow Project Book*. New York: Sterling Publishing Company, 1993.

RECOMMENDED BOOKS FOR CHILDREN

Jordan J., Helene. *How a Seed Grows*. New York: HarperCollins Children’s Books, 1992.

Robbins, Ken. *Seeds*. New York: Atheneum Books for Young Readers, 2005.

For more information, call the Manager of School Programs at 718.817.8124.

Children’s Education
Where Young Minds Grow
www.nybg.org • 718.817.8181