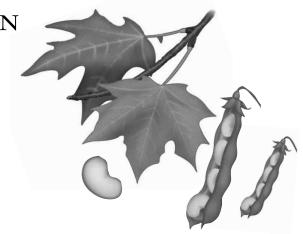
THE NEW YORK BOTANICAL GARDEN

Fall Harvest: Pre-/Post-Visit Activities



TEACHER GUIDE

Thank you for registering for the GreenSchool Workshop *Fall Harvest*. During this workshop, your students will find out what makes a fruit a fruit and explore the Garden grounds to look for fruits and seeds harvested by animals. The following selection of pre- and post-visit activity ideas and recommended resources is designed to support K-2nd grade classroom integration of the plant science concepts addressed in *Fall Harvest*.

PRE-VISIT ACTIVITY IDEASWhat is a fruit?

Students use observation and discussion to learn about what all fruits have in common.

Materials:

- •fruits
- paring knife

Discuss with your students what they know about fruits:

- •What are some fruits you know?
- What do you think makes something a fruit?

Record some of their ideas on the board or chart paper.

Pass your selection of fruits around the class. Encourage students to describe similarities and differences between the outside of the fruits (shape, color, size, etc.), recording their answers. Cut open all of the fruits and display them to the students again, this time telling them to think about the similarities and differences between the inside

of the fruits. Work together to produce a definition of fruit (a fruit is the part of a plant that contains seeds).

Class Harvest

Students grow their own crop of sprouts within a week and strengthen their understanding of the concept of harvesting.

Materials:

- •alfalfa seeds (available in health food stores)
- •1 quart size self-sealing vegetable bag per child
- permanent marker
- •1 brown paper lunch bag per child
- shallow tray or pan
- paper towels

This activity requires 5 consecutive days, so it is advisable to begin on a Monday.

Vegetable bags have air holes in them. If they are not available, use standard self-sealing bags, and poke holes in them with a toothpick. On Monday, give each student a plastic bag labeled with their name and containing a teaspoon of alfalfa seeds. Soak the bags overnight in a tray or pan full of water.

On Tuesday, guide students through the process of opening the bags, running fresh water over the seeds, and draining the water by squeezing it gently through the holes. They should dry the outside of the bag with paper towels before placing in a brown paper lunch bag.

For the next two days, students should rinse and drain their seeds as described above.

First thing Friday morning, instruct students to discard the paper bags and place the plastic bags in a sunny location. They will be able to harvest and eat their sprouts by the afternoon!

POST-VISIT ACTIVITY IDEAS

Apples and Apples

Using a group of similar objects, students practice their skills of comparing, contrasting, and graphing.

Materials:

- •1 yellow apple, 1 green apple,
- 1 red apple
- paring knife
- poster board
- markers and/or small stickers

Prepare a graph on sheet of posterboard by measuring out a grid. Label the horizontal axis with the number of students and the vertical axis with types of apples.

Pass around the three different apples. Encourage your students to describe their visual, olfactory, and tactile observations, and record these on the board or chart paper. Challenge them to think about how the apples are both different from and similar to one another, and to define which characteristics make them apples instead of some other fruit/object.

Ask your students if they think all of the apples will taste the same. Slice each apple into enough small pieces so that each student gets a piece of each kind of apple. Explain that they are going to taste all three and vote for which one is their favorite. After tasting all three, instruct students to place their vote by marking the row of their favorite apple with a marker or sticker. After everyone has completed this task, discuss the results:

- Which kind of apple had the most votes?
- Which kind of apple had the least votes?

 How many more/less votes did the red apple get than the green apple?

A Pumpkin Life Cycle Book

Students use collage and bookmaking to strengthen their understanding of the life cycle of pumpkins.

Materials:

- dry pumpkin seeds
- •18" x 6" strips of sturdy white paper
- •crayons
- •glue
- •green yarn
- yellow, green, and orange tissue paper
- pencils with erasers
- scissors
- construction paper (optional)

Encourage students to share what they remember about the life cycle of pumpkins.

Give each child a strip of white paper. Help children follow these directions to construct accordion books:

Fold the white paper in half lengthwise, and bring one top edge in to meet the fold.

Turn the paper over, and fold the other top edge the same way.

You may wish to have students glue on front and back construction paper covers.

Guide students in decorating each page to represent the pumpkin life cycle.

First page: Color the bottom of the page with brown crayon to make soil. Glue a pumpkin seed in the 'soil'. Make the pumpkin vine by gluing a length of green string in the book so that it starts at the seed and extends through the end of the book. Add leaves along the vine using crayons or tissue paper.

Second page: Use tissue paper and glue to collage a yellow pumpkin flower onto the section of vine.

Third page: Use tissue paper and glue to collage a green pumpkin shape onto the section of vine.

Fourth page: Use tissue paper and glue to collage an orange pumpkin shape onto the section of vine.

Encourage students to write titles for their books, and to add their names as authors and illustrators.

RECOMMENDED TEACHER RESOURCES

Burnie, David. *Plant*. New York: Dorling Kindersley, 2000.

Heller, Ruth. The Reason for a Flower. New York: Penguin Putnam Books for Young Readers, 1983.

RECOMMENDED BOOKS FOR CHILDREN

Hunter, Anne. *Possum's Harvest Moon.* Boston: Houghton Mifflin Company, 1996.

White, Linda, and Megan Lloyd. *Too Many Pumpkins*. New York: Holiday House, 1996.

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