Pollination Partners:
Pre-/Post-Visit Activities

Teacher Guide

Thank you for registering for the GreenSchool Workshop *Pollination Partners*. During this workshop, your students will discover why flowers have different colors, shapes, and smells, and what role animals play in plant reproduction. The following selection of pre- and post-visit activity ideas and recommended resources is designed to support 3rd–5th grade classroom integration of the plant science concepts addressed in *Pollination Partners*.

Pre-Visit Activity Ideas

What Are Flowers For?

Students use discussion and writing to explore their existing knowledge and understanding about flowers.

Materials:
- paper
- pencils

Either in small groups or as a whole class, ask students to brainstorm ideas about what they think the purpose of flowers might be. They should then choose one idea to write about in more detail, including reasons to support their hypothesis. To assist in this process, you might give them starting sentences such as: 'I think that flowers are for.... I think this because...'.

Afterwards, give students the opportunity to share their ideas. Record all of the different ideas and hold a vote for the most popular and/or probable. Check your hypotheses in your GreenSchool Workshop!

Flower Sorting Collage

Students strengthen observation and classification skills by sorting flowers into different groups.

Materials:
- magazines
- construction paper
- scissors
- glue
- markers

Give students a selection of magazines, and ask them to find and cut out pictures of flowers. Challenge them to find a specific number of pictures, or as many different kinds as they can in a given time period.

Ask your students to examine their findings carefully, and to look for similarities and differences. Guide the class through a brainstorming discussion about the various ways these flowers could be sorted or classified.

Explain that scientists constantly group and regroup living and non-living things in order to better understand their relationships to each other. Have your students sort the pictures either by an assigned grouping such as color or shape, or a grouping of their choice.

Students can then glue the groups of pictures onto a sheet of construction paper, writing their sorting theme as the title and the description of each group. Hanging these collages as a classroom display encourages students to think about the many ways of classifying living things.

Post-Visit Activity Ideas

Design a Flower

Students utilize their literacy and drawing skills while extending their understanding of flower pollination.

Materials:
- drawing paper
- colored pencils
- markers

Give your students the following information about pollinator preferences:

- *Bees prefer yellow, blue, and purple flowers shaped like bowls or bells*
- *Butterflies prefer flat-topped red, orange, yellow, pink or blue flowers*
- *Hummingbirds prefer tube-shaped red, orange or purple flowers*

Challenge students to design their own flower using this information. They can draw their creation (labeling all of its parts) and its pollinator with colored pencils or markers. Encourage them to write descriptions of their flower, including its name, and where it might be found. Group the illustrations to form an amazing class garden!

Watch Your Own Flowers Grow

Students use observation skills and hands-on activities to deepen their understanding of the role of flowers in the life cycle of plants.

Materials:
- dried lima beans
- moistened potting soil
- small pots (or empty yogurt containers with holes punched out in the bottom)

Give each student a lima bean and discuss with them the role of the seed in the life cycle of a plant—that the seed is a baby plant waiting for the right amount of warmth and moisture to germinate (begin to grow). You might also soak some lima beans ahead of time for students to open up and find the seed coat, baby leaves, baby root, and food storage area. Explain that they are going to plant this seed and observe its progress through its lifecycle from seed to flower to fruit.

Distribute the rest of the planting materials to students, and guide them through the process of filling the pot or container full of soil, making a depression with their thumb, placing a lima bean in the depression, and covering the bean with soil. Discuss proper care of the plantings, including where in the classroom the plants will get the most sun, and that they should be watered every other day.

Direct students to spend some time every school day observing their plant, recording the changes they observe (such as how many days pass before leaves and flowers appear), and measuring growth. Allocate time each week for students to share and compare information.

Recommended Teacher Resources

Hunken, Jorie. *Botany for All Ages: Discovering Nature Through Activities for Children and Adults.* Old Saybrook, Conn.: The Globe Pequot Press, 1993 (2nd ed.).

Taylor, Barbara. *Incredible Plants (Inside Guides).* New York: DK Publishing, 1997.

Recommended Books for Children

Hauth, Katherine B. *Night Life of the Yucca: The Story of a Flower and a Moth.* Boulder, Colo.: Harvinger House, 1996.

Heller, Ruth. *The Reason For a Flower.* New York: Penguin Putnam Books for Young Readers, 1999.

Gibbons, Gail. *From Seed to Plant*. New York: Holiday House, 1991.

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