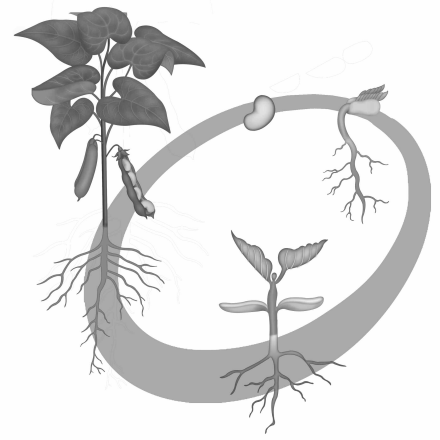


Round and Round: The Life Cycle of a Plant

Pre-/Post-Visit Activities



TEACHER GUIDE

Thank you for registering for the GreenSchool Workshop *Round and Round: The Life Cycle of a Plant*. During this workshop, your students will explore the life cycle of plants, and learn the role that each plant part plays as a plant develops. The following selection of pre- and post-visit activity ideas and recommended resources is designed to support K–5th grade classroom integration of the plant science concepts addressed in *Round and Round: The Life Cycle of a Plant*.

PRE-VISIT ACTIVITY IDEAS

What Makes a Plant a Plant?

Students utilize analytical skills of comparing and contrasting to establish a class definition for plants.

Materials:

- magazines
- scissors
- glue
- construction paper

Discuss with your students what they know about plants:

- What are some plants you know?*
- What do you think makes something a plant?*

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

Distribute a selection of magazines around the class. Explain to your students that they are to locate and cut out pictures of plants. These pictures can be arranged and glued onto sheets of construction paper. Encourage students to write about what is similar and different about these plants.

- Are they all the same color or shape?*
- Do these plants all grow in the same place?*
- Do they all have the same parts?*
- If you touched them, would they all feel the same?*

Share these recorded observations in a class discussion, and use them to formulate a class definition of what makes a plant a plant (ex: Plants are green. They have leaves and a tall stem.)

Seed Sorting

Students practice sorting seeds to build their understanding about seeds, and to strengthen their classification skills.

Materials:

- selection of seeds (for an easy option, purchase a multi-bean soup mix)
- one plate or tray per group

Briefly discuss with your students what they know about seeds:

- What do you think a seed is?*
- What do you think a seed is for?*
- Where do you think seeds come from?*
- What do you think seeds look like?*
- Do they all look the same?*

Divide your class into small groups. Give each group a handful of seeds and a plate or tray to work on. Ask them to work together to sort and resort their seeds into smaller groups: first by color, then by shape, and lastly by size. In between each sort, encourage them to figure out which group is the largest/smallest.

As an extension of this activity, challenge students to brainstorm their own categories for sorting their seeds. Each group can then secretly choose one of these categories. After their seeds have been sorted, direct the students to circulate around the classroom and figure out how each other groups have chosen to sort their seeds.

POST-VISIT ACTIVITY IDEAS

Fruit Printing

Students use tactile art experience to reinforce their understanding that a fruit is the part of a plant that contains seeds.

Materials:

- Several oranges, apples, tomatoes, pears, pomegranates, peppers, lemons
- construction paper
- tempura paint
- paint brushes
- knife

Ask the children what kinds of fruit they like or know about, and then do the same for vegetables. Introduce the botanical concept that a fruit is anything that contains seeds, and that some foods we call vegetables are actually the fruit of a plant (such as cucumbers, tomatoes, peas, and eggplant).

Display a selection of fruits to your class, and cut them horizontally or vertically for all to see the seeds inside.

Let your students take turns printing the various fruits by brushing an even layer of paint on the printing surface, and then pressing the painted slice down firmly on the construction paper.

This will make a great class display! For older students, you might want to challenge them to print a pattern of colors or shapes, or add some writing.

Bean Growth Journal

Students utilize literacy and math skills to reinforce and extend their understanding about the plant life cycle.

Materials:

- 8.5"x14" white paper
- 8.5"x14" construction paper
- hole puncher
- crayons
- pencils

How to make the journal: give each student two sheets of white paper and one piece of construction paper. Help the children follow these directions to construct their journals:

Fold each piece of white paper in half so that the short ends meet. Put one piece of white paper inside the other so the folds meet. Repeat with the construction paper, and put the white paper inside the construction paper so the folds meet.

Open the book up. Use a hole puncher to make two holes along the center crease. Thread a piece of yarn through the holes and tie a bow to join the pages.

As part of the *Round and Round: The Life Cycle of a Plant* GreenSchool Workshop, each student will plant a bean seed. To encourage and strengthen their observational skills, students can record observations, drawings, and measurements of their developing plants in a journal. Use questions such as these to help focus their work:

- *What changes do you notice?*
- *What shapes/colors do you see?*

Encourage students to write titles for their journals, 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

Rockwell, Anne. *One Bean*. New York: Walker and Company, 1998.

Wyatt, Valerie. *Wacky Plant Cycles*. New York: MONDO Publishing, 2000.

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