

## Sorting Out Plants: Pre-/Post-Visit Activities



### TEACHER GUIDE

Thank you for registering for the GreenSchool Workshop *Sorting Out Plants*. During this workshop, your students will step into the shoes of plant scientists as they observe and group plant parts, learn about dichotomous keys, and practice identifying plants. The following selection of pre- and post-visit activity ideas and recommended resources is designed to support K-5th grade classroom integration of the concepts addressed in *Sorting Out Plants*.

#### PRE-VISIT ACTIVITY IDEAS

##### Apples and Oranges

Students learn how to use a Venn diagram to compare and contrast two objects.

##### Materials:

- 1 apple and 1 orange for each table group
- chart paper
- markers

Place an apple and orange at each table group. Introduce the phrase “it’s like comparing apples and oranges” to the class, and explain that it is often used as a way of saying that two things are very different.

- *Do you think apples and oranges are very different? Why or why not?*

Explain that they are going to observe the apple and orange, and record their similarities and differences on a Venn diagram. Model the process of constructing a Venn diagram on the board: draw two inter-locking circles, and write the word “apple” above one circle, and the word “orange” above the other circle.

Show how to record properties that are similar to both in the space where the two circles interlock, and to write properties specific to the apple or orange in the outer part of that fruit’s respective circle.

Distribute chart paper and markers to each group, and guide them through the process of making the diagram and recording their observations.

Remind students to think about physical and sensory properties such as color, shape, size, smell, weight, and texture when making their observations.

When all groups have completed the task, display all of the diagrams and compare the results.

- *Which group found the most similarities?*
- *Which group found the least?*

##### Living Things

Students consider the many variables within the world of living things.

##### Materials:

- magazines
- scissors
- glue
- construction paper

Ask students to share their ideas about the differences between “living” things and “non-living” things.

- *What do all living things have in common?*

- *What do all living things need?*

- *Are all living things the same? Why or why not?*

Have students brainstorm some of the different kinds of living things that they know, and record their answers on the board.

- *Do you think that any of these things go together? How or why?*

Introduce the concept of putting the living things together in groups.

Distribute magazines and scissors to students. Explain that they are to find and cut out pictures of ten different living things. When everyone has completed this task, guide them through the process of dividing their living things into thematic groups—i.e., number of legs, animal vs. plant, carnivore vs. herbivore, color, etc.—and gluing them onto construction paper. Students should write the overarching thematic title on the top of the page, and label each group.

## POST-VISIT ACTIVITY IDEAS

### Sorting Out an Exhibit

Through the process of designing an exhibit, students learn about the relationships between objects.

#### Materials:

- objects
- construction paper
- markers

Have students bring 1–3 objects to school from home. Divide the class into small groups. Explain that each group is going to make an exhibit of their combined objects.

Guide students through the process of introducing their objects to one another and looking for similarities. Students should group objects in ways that tell an overall story or theme. For example, an exhibit could be about colors, with objects of similar color grouped together. Students should design a title sign for their exhibit, and label each grouping of objects.

Each group should choose one student to be the tour guide, and work together to determine what the tour guide should say about the exhibit. Have students rotate

throughout the classroom visiting the different exhibits, with the tour guides at each exhibit describing their group display.

### Fingerprint Findings

Students use the study of fingerprints to sharpen their observation and classification skills.

#### Materials:

- hand lenses
- 2 index cards per student
- wide transparent tape
- graphite pencils

Encourage students to brainstorm ways that they could be divided into groups—eye color, hair length, height, types of clothing, etc. Explain that an important way people can be distinguished from one another is by studying fingerprints, and that you are going to work together to devise a way of classifying a class set of fingerprints.

Distribute index cards, pencils, and tape and have students work in pairs as follows:

Shade in one index card with the graphite pencil.

Write names on the back of the second index card and the words “index” and “middle” on the front.

Carefully roll the finger pad of the index and middle fingers (of the hand used for writing) on the graphite “inkpad.”

Press a piece of tape over each inked finger pad, and carefully peel the tape off of each.

Stick each tape piece under the appropriate heading on the index card.

Make sure to write on the card whether prints were taken from the left or right hands.

Display the fingerprints and have students move around the class with hand lenses observing the different prints.

- What are some similar patterns that you see?*
- Are there any prints that look very different from the others?*

Develop a series of terms to describe the prints, such as swirly, looped, and coiled. Create a class display of prints by splitting them into two categories, splitting each of those into two categories, and so on, until each set has its own descriptive characteristics.

A fun follow up would be to set up a “whodunit”—see who can figure out the set of “mystery prints” first!

### RECOMMENDED TEACHER RESOURCES

**Kopp, Jaine, and Kimi Hosoume.**

*Treasure Boxes*. Berkeley, Calif.: LHS GEMS, 1997.

**Miller, Lenore Hendler.**

*The Nature Specialist: A Complete Guide to Program and Activities*. Martinsville, Ind.: American Camping Associations, 1986.

### RECOMMENDED BOOKS FOR CHILDREN

**Lauber, Patricia.** *Who Eats What?*

*Food Chains and Food Webs*.

New York: HarperCollins Publishers, 1995.

**Taylor, Kim.** *Pattern*. New York:

John Wiley & Sons, Inc., 1992.

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