## The New York Botanical Garden

# A Forest in the City: Pre-/Post-Visit Activities

### **TEACHER GUIDE**

Thank you for registering for the GreenSchool Workshop *A Forest in the City*. During this workshop, your students will observe trees at different stages in their life cycles, search for animal homes, and discover the role of decomposers in the forest food web. 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 *A Forest in the City*.

## PRE-VISIT ACTIVITY IDEAS

#### Adopt a Tree

During repeat outdoor visits, students observe how trees change over time.

#### Materials:

- •paper
- •pencils
- •crayons

Locate a tree outside or near your school that has enough room for all of your students to safely gather and sit around it. Take your class on weekly or bi-weekly mini-field trips to visit this tree. During these visits, give students an extended period (about 10 minutes) to carefully sketch the tree (or part of a tree), after which the group can discuss their observations. These observations can be recorded on chart paper, or in student journals. As you make repeat visits, concentrate your discussions on the changes observed

•Does anything look different? What?

•Why do you think this is?

#### Trees in Our Lives Party

Students broaden their understanding about the importance of trees in their everyday lives.

#### Materials:

- •fruits
- large bowl
- •knife
- serving utensils
- •forks
- •bowls
- •construction paper
- •scissors
- •tape

Encourage your students to brainstorm ways that trees are connected to their everyday lives.

- •*How do trees change our environment?*
- •What are some ways that people use trees?
- •What do you use that is made from trees?
- •What do you eat that comes *from trees*?

Make a list of these ideas on the board or chart paper.

Buy a selection of fruit that comes from a tree. Or, if possible, ask each student to bring one in from home. These can be collected, washed, sliced, and mixed together in a large bowl to make a tree-fruit salad for everyone to try.

While they are enjoying their fruit salad, direct the children to draw and cut out silhouettes of trees. Students can then tape their trees to objects in the classroom that were made from trees.



#### **Post-Visit Activity Ideas** Leaf Bar Graph

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

#### Materials:

- leaves
- poster-board
- •ruler
- markers
- •glue

Prepare a bar graph on the poster board by measuring and marking out a grid that can accommodate whole leaves.

If possible, have each student bring in a leaf from home. Otherwise, bring in enough different leaves so everyone can choose one.

Allow students to share and describe their leaves with each other. Guide them through a discussion of those characteristics (leaf color, shape, type) the leaves may have in common. Choose one characteristic to graph, and work together to form categories. For example, if your graph is to be about leaf shape, categories could include pointy, round, and heart-shaped.

Students should then glue their leaves in the appropriate area. After everyone has contributed a leaf to the graph, analyze the results:

- •Which type/shape/color was the most common?
- •Which type/shape/color was the least common?
- •How many more of this type/ shape/color did we have than the others?

#### Bark Rubbings

In this outdoor activity, students use a creative tactile exercise to broaden their understanding of tree diversity and identification.

#### Materials:

drawing papercrayons

Take your students to an area near your school where there are a number of different kinds of trees. Encourage them to think about the different kinds of trees.

•Are all trees the same?

- •What can you use to identify trees?
- •What if there are/were no leaves on the trees?
- •What is similar/different about these trees?

Explain to your class that bark texture is often used to determine the identity of trees. Direct them to run their fingers along the bark of two or three different trees—closing their eyes might help to focus on the tactile sensation—and to concentrate on how the textures are different.

- •Which was smoother/ rougher?
- •Were there any bumps or other irregular areas?

Distribute paper and crayons to your students. Guide them through the process of working in pairs to create bark rubbings by having one person hold the paper as flat as possible against the surface of a tree while the other partner rubs against the paper with the side of a crayon. Encourage them to make comparisons between the textures they felt and the patterns that are formed in the rubbing. They can create interesting designs by making rubbings from many trees on different sections of a sheet of paper.

These can be mounted and hung back in the classroom. As an interesting extension, have your students cut up the rubbings into small squares, which they can use to create a mosaic picture.

#### **Recommended Teacher Resources**

**Burns, Diane L., and Linda Garrow.** *Trees, Leaves, and Bark (Take-Along Guide)*. Minetonka, Minn.: NorthWord Press, 1995.

**Fielding, Eileen.** *The Eastern Forest.* Tarrytown, N.Y.: Marshall Cavendish, 1999.

**RECOMMENDED BOOKS FOR CHILDREN Brenner, Barbara, and May Garelick.** *The Tremendous Tree Book.* Honesdayle, Pa.: Boyds Mill Press, 1998 (Reprint).

**Hooper, Roseanne.** *Life in the Woodlands*. Princeton, N.J.: Two-Can Publishing, 2000.

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