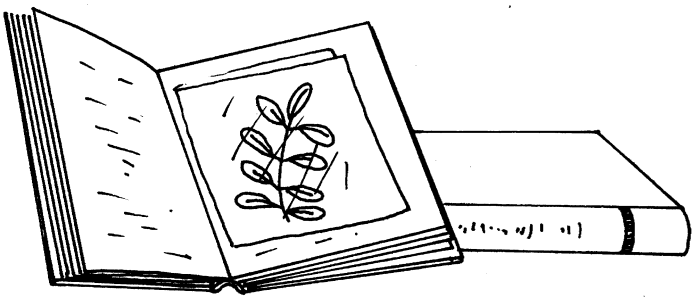
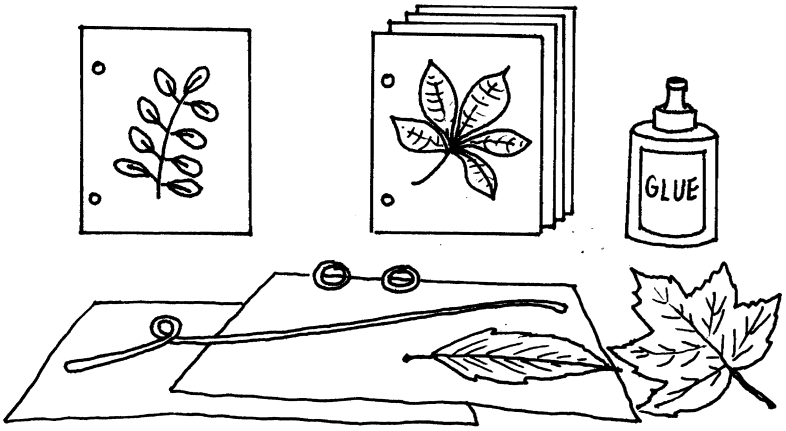
OUTDOOR ACTIVITIES

Pressed Leaf Book

3 to 6

Submitted by Romania





Purpose: Children learn through direct interaction with tangible objects. The outdoors is a wonderful place to learn and reinforce concepts such as colors, shapes, textures, and sizes. Comparing the characteristics of leaves and making a pressed leaf book furthers the young child's conceptual knowledge base. The children also learn that falling leaves are a characteristic of autumn.

HOME CONNECTION

Encourage parents to spend time looking at the books with their children. They should listen, ask questions, and be receptive to the children's comments.

Materials:

heavy book	wax paper
glue	brightly colored leaves, including green
white paper	metal rings or string

Preparation:

1. Before pressing the leaves in the heavy book, put the leaves in between wax paper or paper towels to prevent staining the book.

2. Place the leaves between the pages of the book. Find heavy objects to place on top of the book to press the leaves.

3. To make the leaf book, cut pages of equal size and shape and assemble the book (see illustration).

Activity: Take a "leaf walk" and encourage the children to examine the different textures and colors of leaves and then bring them back to the classroom for further handling and examination. Place some of the leaves on display, and ask each child to select a leaf to be pressed and added to a class leaf book.

After the leaves have been pressed, glue them on a page. The teacher can write down the child's words under each leaf: “This is a red, bumpy leaf.” “This leaf looks like a star.”

Older children can write their names. Children will look at this class book over and over.

Extensions and variations:

- Make leaf rubbings. Place a leaf with its vein-side up under a piece of white paper and rub lightly over the paper with a soft pencil or crayon. Or make leaf prints by pressing a leaf on an ink pad with the vein-side down. Position it on a clean piece of paper. Cover the leaf with another sheet of paper and make the print by gently rubbing with fingertips.

- Flowers can also be pressed and made into a book. Select flowers of varying colors, shapes, and sizes and discuss these attributes with the children.

- Press leaves between sheets of wax paper and iron the paper lightly to seal it. (For safety, be sure an adult helper manages the ironing activity.) Ask the children what caused the wax paper to stick together. Hang the translucent art at the window so that the leaves appear to be falling from the sky.

Outside Water Painting

3 to 6

HOME CONNECTION

Encourage parents and children to "play paint" together using old brushes and water. This is a time for relaxed, easy interaction; it is a time for parents to listen to their child's comments and observations as the child watches what happens to the water.

Purpose: In this activity, children paint with water on a paved surface or playground. They see the water markings evaporate. This activity helps children see the effect of air and sun on water, as the sun heats their water pictures. Besides exposing children to the concept of evaporation, the activity refines fine and gross motor skills, and facilitates imagination and free exploration.

Materials: small pails or wide cups
water in a pitcher
large, flat paint brushes

Preparation:

1. Give each child a small pail or wide cup half filled with water and a large paint brush. Have extra water in a pitcher for refills.

2. Talk a walk outside on a sunny day and locate a painting area for the children. Sidewalks, the side of a building, playgrounds, or paved surfaces are most appropriate.

Activity: Begin the activity in small groups. Tell the children that they are going to learn about the science of water and air, which at first seems a mystery. The children will paint outside on a walkway with water and carefully watch to see what happens to their paintings. After they have had ample time to explore this phenomenon of disappearing water, lead the group in a discussion about evaporation: "What happened to the creations? When the sun heats the water, we say the water *evaporates*. Can you think of any other situation where water evaporates?" Have the children paint with water in a sunny area and in the shade. "Are there any differences? Do you think a windy day will speed up evaporation or slow it down? What do you predict will happen on a cloudy day?"

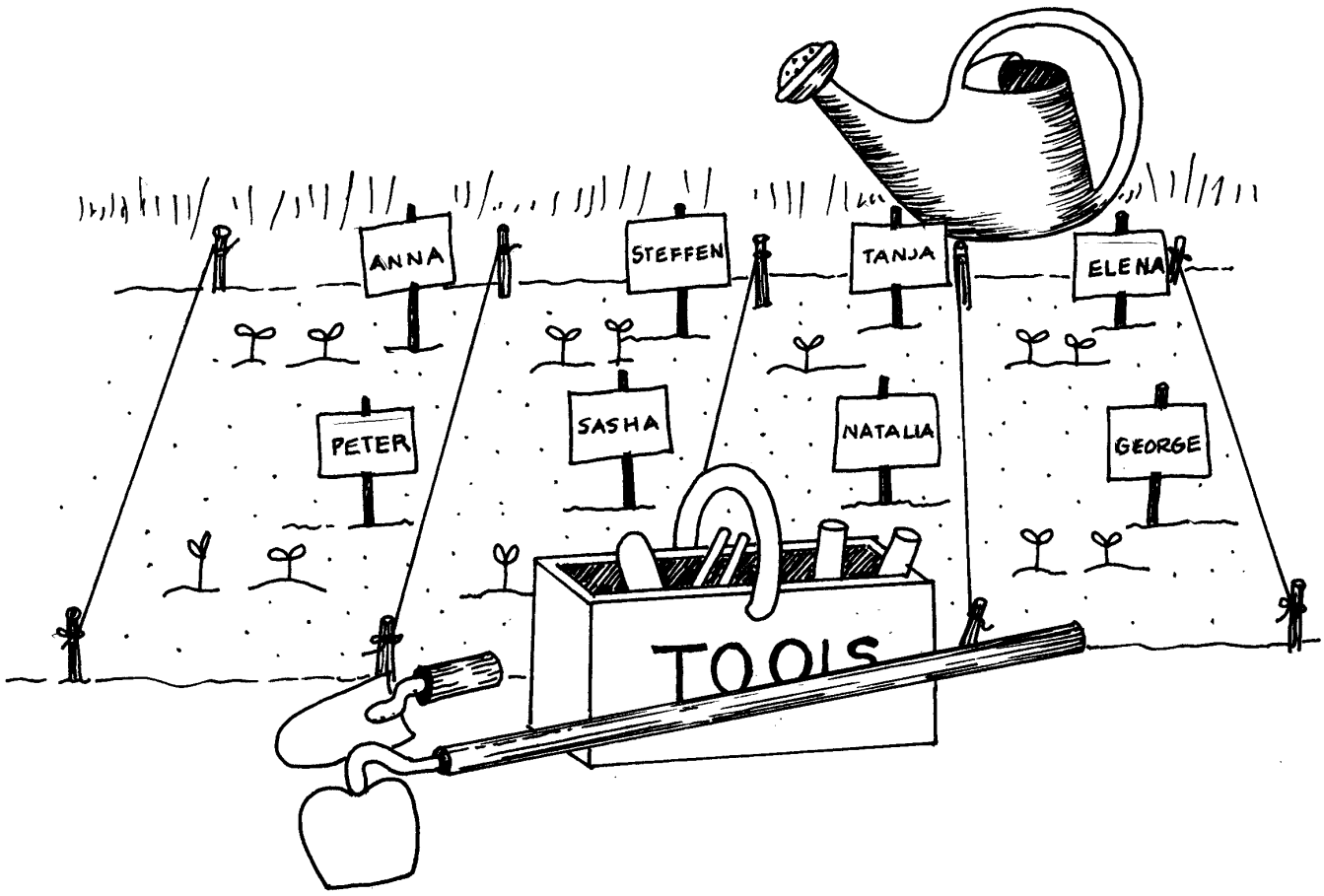
Extensions and variations:

- Place a shallow dish of water outside in the sun. Check the dish at the end of the day.

- Extend the discussion on evaporation by thinking about oceans, rivers, lakes, fog, clouds. Does the sun heat the bodies of water? Does that water evaporate?

- What happens when you put your wet clothes on a clothesline? Set up an outdoor laundry project, with water table or a big tub, soap, clothesline, and clothespins. Hang the clothes in the sun to dry.

Gardeners



HOME CONNECTION

Parents can plant a seedling or seeds with their child. The child can tend the plant and take responsibility for it.

Purpose: Planting seeds and tending plants is a wonderful learning activity for children of all ages. Gardening can take place either indoors or outdoors. Gardening teaches the elements necessary for growth and sustaining plant life. It also exposes children to concepts such as change, size, shape, and color. Children will learn responsibility and enjoy the rewards of their efforts. They will also learn how seasons affect the garden. They watch the garden during each season and discover the differences.

Materials:

Indoors	**Outdoors**
containers for plants	garden tools
pebbles	seeds or plants
soil	watering can, hose, or buckets for water
large spoons	string and sticks to mark off sections
water	
seeds or plants	

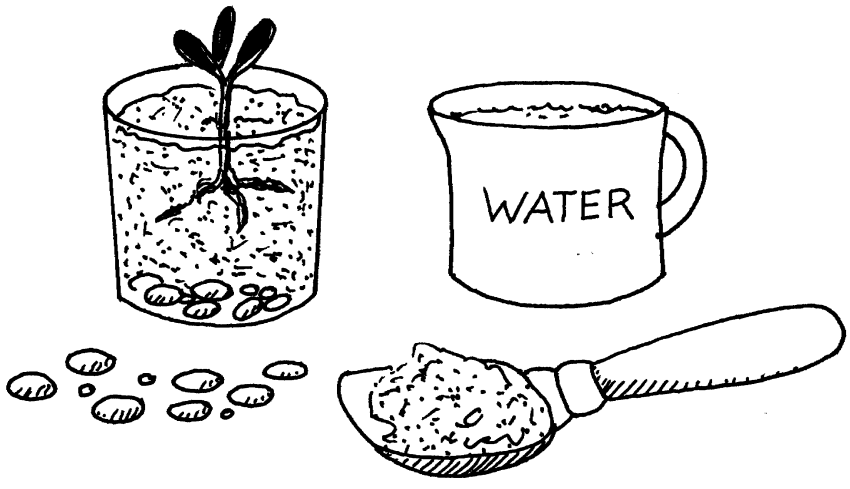
Preparation:

For indoor planting:

1. Each child should put pebbles in the bottom of a container for drainage and fill the container with damp soil.

2. Plant seeds of herbs (chives, thyme, parsley, or basil), other house plants, or flowers. Cover lightly with soil and pat gently.

3. Water and set the plant containers on a sunny window sill.



For outdoor planting:

1. Find an available outdoor space where children can grow herbs, vegetables, or flowers. Give each child a small space rather than a large one.

2. Have on hand a variety of gardening materials: child-sized garden tools (shovel, rake, hoe, etc.); seeds or plants; access to water (watering cans, hoses, or buckets); string and sticks to mark off the rows or sections.

Activities for indoor gardens: Encourage the children to make their own herb garden containers. Teachers can offer guidance when asked, but let the children make their own decisions about how and what to plant.

Make a few extra plantings. Place a few plants away from the sunlight. Take two different plants and do not give them water. Ask the children if they notice a difference in the growth of the plants in the sun, away from the sun, and without water. Ask, "What do seeds need to grow and live? Do all seeds sprout at the same time?" Help the children notice that the seeds grow in a similar way, but each is a little different. "Can you think of other living things that grow in a similar way, but each of which is a little different?"

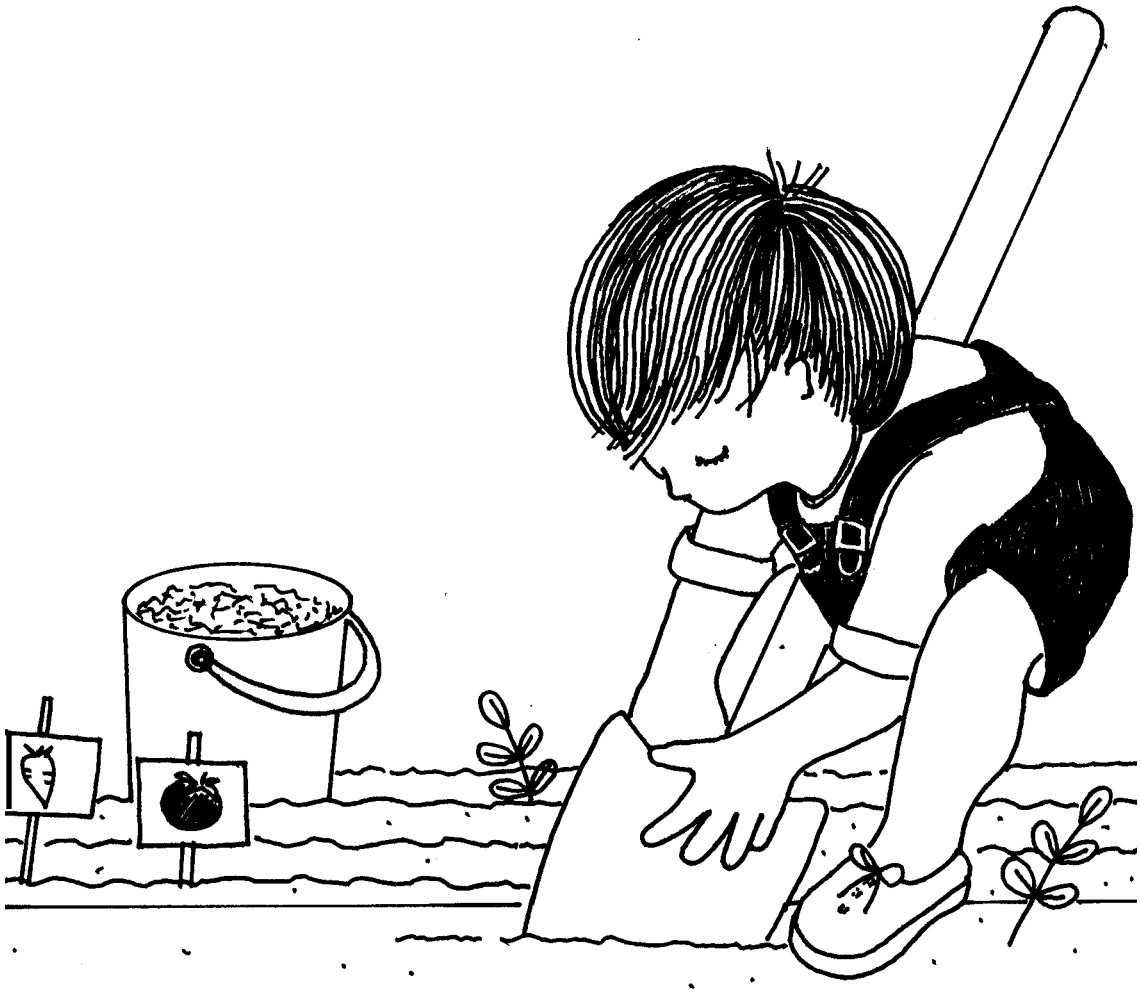
Activities for outdoor gardens: A successful garden takes some advance planning. Find a flat place outdoors that has at least 5 hours of sun each day. A 2.5 m. x 2.5 m. area will allow space for several different plants, but a smaller space will do. Add fertilizer or compost to the soil.

Have the children use the gardening tools to plant flowers, vegetables, and herbs. Ongoing maintenance is a must when working in a garden. Encourage cooperative play among small children when weeding, watering, and harvesting. Take time to smell fragrant scents or to admire the brightly colored flowers.

Promote children's thinking by asking questions such as, "Why do you think plants grow toward the light? What do plants need in order to grow?"

Extensions and variations:

- Take children on a field trip to a nursery, greenhouse, farm, or home garden.
- See what lives in the garden soil. Curiosity will be high when earthworms and other soil creatures are found. Look at the soil with a magnifying glass.
- Use graphs to record how long seeds take to sprout. Measure the growth of plants, compare their sizes and shapes.
- Ask a family member who likes to garden to talk to the children about gardening. What is her favorite thing to grow and why? Why does she enjoy gardening? Why is gardening useful to a family?



HOME CONNECTION

Parents can provide a shelf or small area at home for children to establish a collection of interesting objects gathered while outside playing or on walks. They should encourage their children to describe the items and tell why they find them interesting.

Purpose: This activity introduces the use of magnification through lenses, a practice important for the study of science. After a nature walk where children touch and observe many natural objects, they will select several items to observe more closely through a magnifying glass. A new word, *magnifying*, will be added to their vocabularies, and they will gain additional knowledge of the importance of "tools of the trade." Along with promoting tactile discrimination, a magnifying glass will encourage curiosity and the development of descriptive language as children talk about nature objects.

Materials:

- cardboard or heavy paper
- magnifying glass
- glue
- natural objects such as nuts and berries

Preparation:

1. Children collect interesting objects from nature, such as pine cones, tree bark, nuts, berries, leaves, rocks, flowers.

2. Glue each object onto a durable piece of paper cardboard.

Activity: Let the children examine their findings. Then show the children a "magnifying" glass. Notice the rounded shape of the "lens." Discuss respectful care of tools and let the children examine their "specimens." Ask, "What does the magnifying glass do to the items?" Let the children describe what they see.

Some questions to promote discussions are "How does this feel?" "What do you think birds (or animals) do with this?" "Where did we find this?" Encourage children to use descriptive words such as *rough, smooth, texture, slick, bumpy*. Older children should be prompted to expand their descriptions using two or more details, for example, "The rock is round and smooth with lines on it."

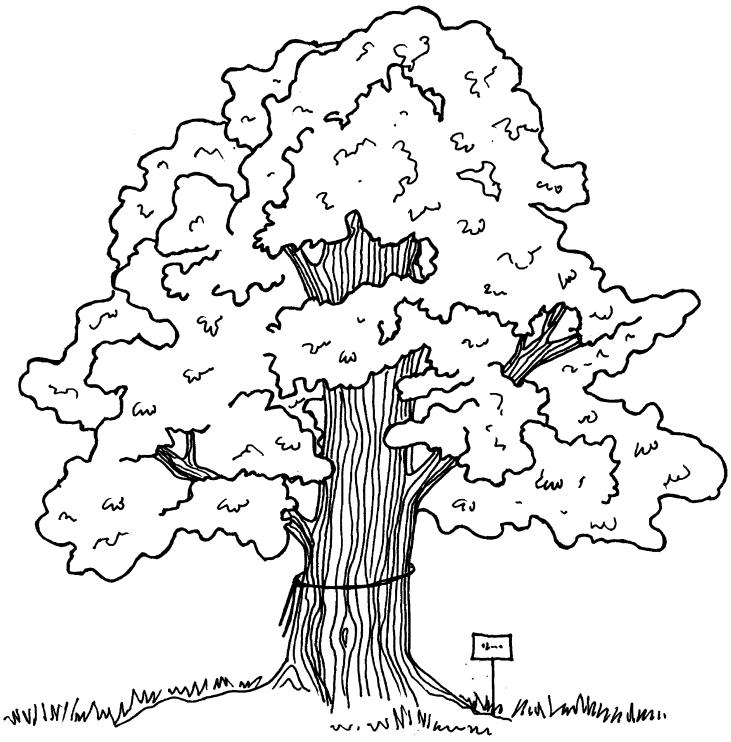
Extensions and variations:

- Show the children a pair of magnifying eyeglasses. "What do the glasses do for people?" Look very closely at another child's eye (from the side): "Do you see something that looks like a lens? What does it do?"

- The teacher can document the children's descriptions by writing down their words on cards and gluing them next to or under the nature item. This will encourage early literacy skills, and teach children that printed words hold meaning.

Adopt a Tree

4 to 6



Purpose: This is a year-long project for children. A group of 3 or 4 children "adopts" a special tree that is near the classroom. On regular walks, they observe changes and growth in the tree. They note the differences as the seasons change and see the effects of rain, wind, and other weather conditions. Children compare trees with each other. This science activity encourages children's interest in nature, and helps develop observation and communication skills. It affords an opportunity for teachers to raise questions and thoughts related to the natural world.

Materials: several different colors of yarn or string paper and pencil
crayons or markers

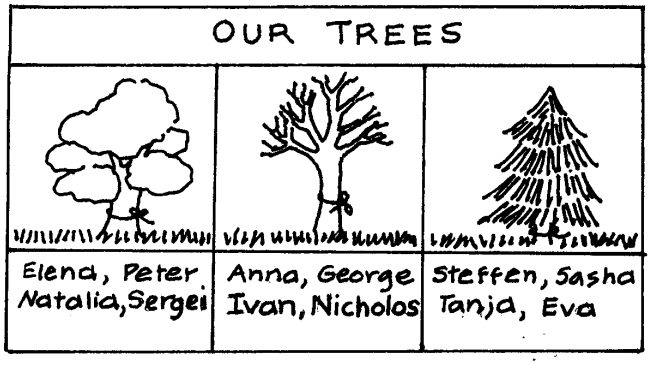
Preparation:

1. Once the children have selected a tree that will be their tree to observe, mark each tree with a different color of yarn or string. This helps the children remember and locate which tree they have selected.

2. Make an identification chart showing the location, children's names in the group, and color marker on tree.

HOME CONNECTION

Send a note home explaining this activity to parents. When parents visit the center, suggest that the children take them to see their adopted trees. The children can share their excitement about their trees. Families could also adopt a tree in their neighborhood.



Activity: In the autumn, gather the children together in groups of 4 - 5 for a walk around the neighborhood. While walking, the children should pay special attention to the trees. Their group is to choose 1 tree that will be their special tree for the year. After they have chosen the tree, they may draw a picture of it. The small groups should have time to fully explore all aspects of the tree: guess how high it is, how big around the trunk is, how it feels, how it smells, what the leaves look like, etc. Take small groups of children out to observe their trees at different times of the year: with leaves, without leaves, in the snow, in early spring when the first buds appear, when the flowers or seeds appear. If possible, take photos or draw pictures to document the seasonal changes.

Extensions and variations:

- Compare the bark, leaves, and seeds of the trees adopted by the groups. How are they different? Are they alike in any way? With 5 and 6 year olds, call their attention to the leaves. They can be simple or compound, opposite or alternate.

- Encourage the children to give their tree a make-believe name. They may enjoy making up stories about the tree. Some children may want to draw pictures to go with the stories.

- Make leaf prints. The children can collect as many types of leaves as possible. Look for leaves that are not too dry and brittle. Put a little tempera paint on a sponge. Press the leaf against the sponge and then against a piece of paper.

- Make bark and leaf rubbings. Lay a piece of paper against the bark of your tree. Pick up the texture by rubbing the flat side of a crayon over the paper. The same thing can be done in the classroom using leaves.

- Borrow a tree book from the library to help with the identification of your trees. With one child at a time, examine the pictures of trees and notice together similarities and differences in the physical characteristics of the trees. Avoid technical terminology. The older children may enjoy looking through the book to see if they can find a picture of their trees or their classmates' trees.