

As children learn that different birds are present at different times of the year, they may be interested to find out that some birds migrate during the year. The **ArtSpace** painting entitled *Prairie Spring*, by Francis Lee Jacques, shows a flock of Canadian geese on their migratory flight north in the spring. The children may want to know if there are any seasonal birds observed at their bird feeders which migrate like the Canadian geese. They might enjoy having an ornithologist come to the classroom to explain the habits of the birds that they have charted at their feeders. If the visitor brings appropriate videotape or a relevant movie, the experience would be strengthened.

Different species of birds exhibit varying behaviors, so children may enjoy identifying, then recording the antics of the birds. Children's observation skills are sharpened by keeping a journal of behaviors of birds seen at the feeder. Videos can be made of the feeding habits of the birds in the springtime. The class can place the movie into *HyperStudio* and narrate a story about the birds they have observed, developing their own unique and relevant software. Decorate the classroom with the children's drawings and paintings of the birds they have seen or with their play dough or clay sculptures of birds.

A visit to an aviary or pet store introduces children to exotic birds. Learn the differences among native birds, domestic farm birds, game birds, and exotic birds from other lands. Feathers from certain birds are used for different purposes, including clothing, pillows and comforters, and for decoration or ceremonial traditions. By activating the **Cultural Diversity** category on **ArtSpace**, some uses of feathers can be seen, then children can create sculptures, masks, and collages using feathers and other materials associated with the cultures being studied.

Encourage children to imitate the movements and sounds of the birds they observe. Use different types of music that seems to relate to the birds. *Bird Songs* software by ProtoHype provides older children with opportunities to try out their visual and auditory discrimination skills by playing games in which they attempt to identify birds by their picture or by their song. Younger children may like to listen to the bird songs to see if they can identify the birds which frequent the feeder.

Materials Needed

Art Materials: Yarn or string, glue, paper, bird seed, and craft feathers

General Materials: Milk cartons, pine cones, bird seed, peanut butter, video camera, paper and markers for charting

Adaptive Materials: Masking tape, foam (pipe insulation, hair roller, commercial grade), and bird choice cards, TouchWindow

Computer Software: *Bird Songs*, ProtoHype; *Circletime Tales*, Don Johnston, ages 3 - 8; *HyperStudio*, Roger Wagner, ages 4 & up; *Kid Pix*, Brøderbund, ages 3 - 12; *Kid Pix 2*, Brøderbund, ages 3 - 12; *Kid Works 2*, Davidson & Associates, ages 4 - 12; *My First Incredible Amazing Dictionary*, Dorling Kindersley, ages 4 - 8

Flowers and Plants

ArtSpace includes 24 images of flowers and plants. Some were painted, using oil paint, such as *White Lotus*, by Georgia O'Keefe, while others such as *Flowers*, by Brice Shake were created using computer technology. Others are sculptures cast in bronze such as George Potter's sculpture, *Flower Pot in Window*, and still others were drawn using crayons and markers. **The Studio** has flower images children may wish to select to simulate drawing the flower picture by

pressing a switch. Flowers have been used in different ways in the **Galleries** and the **Studio**. Flowers decorate hats, are used as boutonnieres, are in vases, or appear in their natural outdoor surroundings. As children view the flowers in **ArtSpace**, discuss details about what they see.

Bring potted flowering plants into the room for color, conversation, and learning about plant growth and care. Be careful, though: some plants and parts of plants are poisonous! Select only safe plants and seeds in for your activities. Most local extension offices, health departments, and poison control centers have information pamphlets available.

One of the best ways to gain knowledge about flowers and plants is to plant a garden, whether outside or inside in pots. Starting a garden from seeds is a good winter activity for northern climates. If possible, when planting seeds, place them in a plexiglass box so children can see growth both above and below the soil. When the seedlings are ready to be transplanted, the last frost should have passed. Prepare a garden spot outside, then plant the seedlings and care for them. Use the book *Experiment with Plants*, which contains very simple experiments that are fun and interesting for children. Studying stems, leaves, and petals under a microscope gives a whole different view of plants.

Observe then graph how long the seeds took to sprout. Make a plant lotto game either from seed packages or *Forever Growing Garden*. Boards and cards can be laminated or covered with contact paper. Pumpkin, watermelon, sunflower, and other seeds can be sorted. Planting tulip and daffodil bulbs in the fall then watching for them to pop through the ground and bloom in the spring shows children examples of life cycles, transformation, and changes.

A visit to a florist shop, greenhouse or nursery extends learning. Talking about the different smells and textures is especially helpful for children with visual impairments. Before taking such a trip, check to see that none of the children have severe allergies to flowers and that parents are aware of the trip so they can provide medication if necessary. Watch out for thorns! Florist picks, foam or clay, and silk flowers are excellent props to extend the activity after the visit. Children may set up a florist shop in the dramatic play area to make flower arrangements and sell them.

Children can also draw or paint flowers using markers, crayons, and paints or computer graphic programs such as *Kid Pix*. Tissue paper, pipe cleaners, and other collage materials can be used to make three-dimensional flowers. Flowers can also be made from clay or play dough. Catalogs from seed companies offer many beautiful pictures of flowers and plants which can be cut out and used for picture collages. Dry flowers and make them available for children to incorporate into their artwork if they wish.

In the music and movement area, there are many activities to try. Children can pretend they are small, tiny seeds which grow and bloom into flowers. Then they can pretend that the sun is shining, the wind is blowing, or the rain is pouring. What happens to the flowers? Play a recording of "*Waltz of the Flowers*" so the flowers can dance or invite all the flowers to join in a game of "Ring-around the Rosy."

There are many books about plants and flowers to use in the classroom. Some are scientific, cultural, poetic, or fictional stories. Choose books with large, eye-catching pictures and make them accessible in the classroom library. Display flower pictures or posters throughout the room.

Computer software programs that relate to plants and flowers include *The Backyard* and *Forever Growing Garden*. In *The Backyard*, a package of pumpkin seeds is in the garden. If the children activate the seeds, Pepper or Ginger Mouse will plant them. If the children activate the sprinkler, the seeds will sprout, pollinate, and grow a pumpkin. If the children activate the pumpkin on the picnic table, they go to The Pumpkin Patch where they can use fruits and vegetables to create all kinds of faces. In *Forever Growing Garden*, children can design and plant their own vegetable

and flower gardens. Then they can sell what they have grown at either the *Flower Shop* or *Market*. Both programs can be used with a TouchWindow.

Materials Needed

Art Materials: Florists picks, foam, clay, a variety of paper, paint, markers, paper, play dough, tissue paper, pipe cleaners, and silk flowers

General Materials: Seeds, plants, garden tools, containers, potting soil, microscope, contact paper, paper, and markers

Adaptive Materials: Cushion grips for garden tools, TouchWindow

Computer Software: *The Backyard*, Brøderbund, ages 3 - 8; *Forever Growing Garden*, Media Vision, ages 3 - 10; *Kid Pix*, Brøderbund, ages 3 - 13; *Kid Pix 2*, Brøderbund, ages 3 - 13

Trees and Forests

Although inner city children may see few trees unless they go to a park or playground, many children see trees almost every day but may not notice them. Adults know that trees differ, depending on where you live, but children do not. **ArtSpace** contains 24 images of a variety of trees. Some pictures depict a forest full of trees such as Jim Neumann's wood block printing called *Lake Katherine's Woods*, while other images show a single tree that plays a small, but valuable part in the overall composition of the picture. Trees shown in northern climates and tropical zones include evergreens and palm trees. Some are shown in winter, others in fall, summer, and spring. Artists used different techniques to represent their symbols of trees. Some artists made their trees as realistically as they could, while others decided to use more abstract symbols through the use of line to depict trees. One example is the Chinese landscape painting by Shao Mi of the Ming Dynasty.

Ideally, studying trees would extend throughout the year so children can carefully observe the seasonal changes that affect many trees. Take frequent walks around the neighborhood. Take along a measuring tape to measure the diameter of the trees, a camera and/or a video camera to take pictures of the trees, paper, crayons or chalk for bark rubbings, and bags to collect materials for collage activities. Be sure to take only those items that have fallen from the tree so you do not harm the tree. Discuss care of trees at home, in parks, and in the woods. Identify as many trees as possible. Do any of the trees in your neighborhood look like trees found on **ArtSpace**?

After returning from the walk, use the found objects from trees as collections. Talk about the concept of collections as groups of things that they have acquired and note that museums also contain collections. Some can be placed in the math and science areas to count, sort, and examine. Leaves are especially fascinating to examine under a microscope or a magnifying glass. Pine cones, leaves, acorns, seed balls, and pods can be sorted according to a variety of attributes. Items can be sorted by color, size, shape or function. Decide on other attributes for grouping then sort for those characteristics. Some children like to count when they sort, then they may be interested in charting and graphing how many of each item they have in the collections. Display an interesting collection as a center of interest in the classroom or make posters demonstrating what children learn about trees using real objects.

Use the nature walk objects in the art area. Collect leaves to use for collage activities or to construct a scrapbook with laminated pages. Press leaves and flowers for later use between wax paper sheets or laminate them between contact paper or lamination plastic for greeting cards or

window decorations. Leaves can also be used for leaf rubbings. Do this quickly after the trip is over before the leaves become dry and brittle. Use the side of a crayon or a piece of chalk to rub the outline of the leaf under the paper and feel the veins of the leaves under the crayon. Talk about why the impressions of the leaves appear.

Ancient peoples used sticks and stones as we use paintbrushes. Just as you can use the pointed end, side, and round end of crayons when they are unwrapped, children can experiment using parts small tree branches they have found. Few evergreen branches fall off of their own accord, but when evergreen trees are pruned, different parts of their branches can be used as paint brushes. If children have a variety of cedar, pine, and fir trees growing in their yards, compare the marks the different tree brushes make. In what ways are they different from the brushes usually used? Is it easier or harder to use sticks and branches as brushes? Pine cones, acorns, and other seed containers can be used as stamps to make prints. A plastic tray containing a paint-soaked sponge makes a good stamp pad for dipping objects before printing.

A group collage, fostering sharing and teamwork, and depicting a tree begins with a large piece of cardboard or corrugated paper placed on the floor. Discuss the characteristics and parts of trees and decide what kind of a tree to make. Make a trunk then add branches and leaves. Use materials from the nature walk, along with paper towel rolls, paper or cloth scraps and any other type of material that seems appropriate to you and to the children. Also decide with the children on appropriate colors. Apply glue with cotton swabs or small glue bottles. If some children are not ready for gluing, use Con•Tact paper placed sticky side up. If papers have tears and holes, a child may very well decide that a bug ate it. You can make a tree with realistic characteristics or a fantasy tree—perhaps one that grows cakes and cookies or toys. Then make up a story about your tree.

Narrate a simple story about a tree growing. Children can participate as a group as you tell the story. The whole class might be an entire tree farm or grove of trees that are alike or that contain a variety of trees. The trees grow from a seed planted in the ground, with sun and water, as the seasons change, into a tall tree with wind blowing through their branches and leaves, rain falling on them, or leaves turning toward the sun (someone might play the part of the sun or the wind). Some of the trees might flower in the spring. Create variations on this theme and ask children for suggestions that might include raking leaves, going to a tree farm to choose a Christmas tree, or going to an orchard to pick apples or other fruit, also possibilities for field trips. This activity does not need props; however, newspaper, crepe paper, colored paper, or paper bags can be cut into strips and made into leaf pompons to hold in each hand. Use variations of recordings or audio tapes with the sounds of tropical rain forests or woodland forests and streams, available in most places where tapes are sold, including discount stores.

Outside in the fall, rake the leaves into a leaf maze and follow the path. Make sure the ground is even so those in wheelchairs will not have a bumpy ride. Collecting leaves, then making and tending a compost pile might be possible in some schools.

Children's literature and software go hand-in-hand with trees and forests. Children can learn about how trees grow, how they serve as homes for different animals, and how they help humans. *Big Book Maker* contains the illustrations for stories children can write about Johnny Appleseed and Paul Bunyan. *Story Book Weaver* and *Storybook Theatre* allow the children to create their own stories about trees and forests.

Materials Needed

Art Materials: Paper, crayons, chalk, found nature objects (leaves, acorns, pine cones, seed pods), paint, brushes, paint tray, sponge, newspaper, crepe paper, collage materials, and cotton swabs