

## ACTIVITIES

### Leaf-and-Seed-Sort Information Chart

- Objective:** To be able to classify leaves and seeds as monocots or dicots.  
**Time:** 25 minutes.  
**Materials:** Corn seed, peanuts, leaf with parallel veins, leaf with netted veins, construction paper, crayons.

Ask the gardeners if they have a certain place in their room where they keep their socks, shirts or toys. Have them think about a kitchen drawer full of knives, forks, spoons, etc. The drawer is organized so that each utensil has its own place. Tell them that the reason they are organized that way is to make them easier to find and use. Explain that scientists who study plants do the same thing: They organize or classify plants into different categories so they are easier to learn about and use.

Explain that scientists divide plants into two main groups: monocots and dicots. The veins in monocot leaves all go the same direction, or parallel; veins in dicot leaves go different directions, and are called netted. Hold up the two leaves and see if gardeners can tell which is a monocot and which is a dicot. Show them how to lay a sheet of paper over the leaf and rub over it with the edge of a crayon to show the veins of the leaf on the paper.

Another way to differentiate a monocot seed from a dicot seed is that a monocot seed is in one piece, whereas a dicot comes in more than one piece. Show them the corn and peanut seeds and ask which is which.

Have each gardener fold a large (11- by 17-inch) sheet of construction paper in half three times to make a sheet with eight sections or boxes. The gardeners should turn the papers so that they make two long columns up and down. Have them label the first box with the word MONOCOT in large letters. In the box below that, they should make a rubbing of a monocot leaf. They should glue the monocot leaf below the rubbing, and a monocot seed in the box under the leaf.

Monocot	Dicot

Have them complete the second half of the box the same way using the dicot information.

#### In the Classroom

Folding paper is a good opportunity to reinforce fraction skills. When you fold the construction paper in half, show the students that the paper is folded into two parts. Tell them that each part is called one-half and write  $\frac{1}{2}$  on the board. Ask them how many halves are on the page. Since there are two, explain that there are two halves on the page. Write  $\frac{2}{2}$  on the board. Do the same thing each time you fold the paper in half again—you can introduce one-fourth ( $\frac{1}{4}$ ), four-fourths ( $\frac{4}{4}$ ), one-eighth ( $\frac{1}{8}$ ) and eight-eighths ( $\frac{8}{8}$ ).