ENVIRONMENTAL LEARNING PROGRAMS
CELEBRATE WILDFLOWERS

#13 BASIC WILDFLOWER CLASSICATION

CONTENT	Wildflowers and other plants can be catagorized by the shape of their flowers and the arrangement and number of flower parts.
GRADE LEVEL	K-6
OBJECTIVES	Learn the basic concept of plant classification.
PROCESS AND RESEARCH SKILLS	Observation, comprehension, classification, application, synthesis, decision making, group interaction, and cooperation.
PRODUCT	A rudimentary classification system.
SUGGESTED LOCATION	In the classroom.
TIME REQUIRED	30 minutes to one hour.
MATERIALS	Several large pieces of paper, pencils, six sets of six different kinds of cut flowers (36 flowers total, from the florist), a jar filled with (about 30 pieces) assorted sizes and shapes of nuts, bolts, screws, washers, nails and other hardware.

ACTIVITY AND DISCUSSION

1. Place one piece of paper on a table or on the floor. Pour the jar of hardware onto the paper.
2. Discuss with the class how this mixture of different objects might be separated into groups. As the class discusses, agree on some divisions. Have the students help divide the mixture of hardware into groups. (Divisions will probably be: washers in one pile, screws in another, nails in another, and so on.) As a group, you have just classified the hardware "kingdom" into smaller "family" groups. (If someone suggests dividing by color or length or whether or not one will stand on edge, do not discount these ideas!)
3. Note that flowers of differnt kinds can also be divided into groups by they way they look.
4. Divide class into six groups. Give each group a set of six different flowers and a large piece of paper.

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ACTIVITY AND DISCUSSION CONTINUED

5. Explain that botanists classify the plant kingdom into smaller family groups. Have students study the characteristics of their six flowers and determine how to divide them into three or more smaller groups.

6. Separate these groups out on the paper. Beside each group, have students write a description of the group, answering the question, "Why are these particular flowers classified together in the same group?"

7. Mix flowers into a large group again and classify the flowers into three or more groups using different criteria.

EVALUATION

Understanding of classification of the hardware kingdom by applying observation skills and concepts of classification to the 6 flowers.

EXTENSION 1

Have each student group classify their flowers into six groups (one flower in each group.) Have them explain their reasoning. Simplification by classification down to a single species, is the very point of plant classification!

EXTENSION 2

There are nearly 350,000 known species of plants in the world. Imagine the task of classifying that many plants! It is a constant job begun in 1753 by Carl Linneus and carried on by botanists today.

Bell-shaped

Corabells

Harebell

Virginia Blue bells

Daisy-like

Aster

Black-eyed Susan