Leaves Activities *(cont.)*

Patterning

Pattern recognition is a beginning algebraic concept. Patterns are created by alternating variables such as colors, sizes, numbers, shapes, sounds, and/or objects. Children need to recognize repetition in order to create and extend a pattern.

Materials

- leaves or leaf patterns on pages 94–96 or color versions, leaves.pdf on CD, at least 6 per student
- safety scissors
- fall-colored construction paper if leaf patterns are to be used

Directions for Teacher/Students

1. Model simple AB, ABB, etc. patterns. (AB for type of leaf might be—oak, maple, oak, maple or an ABB pattern for leaf color might be—red, green, green, red, green, green)
2. Have students make patterns using the leaves. Ask them to "label" their patterns. "red leaf, green leaf, red leaf, green leaf" (AB, AB)
3. If appropriate, compare leaf shapes—many points, one point, etc.

Leaves Graphing

Transfer the information learned through sorting and graphing to a graphing activity. Allow the students to identify the similarities and differences of the leaves according to their size and color. Create a graph using these discoveries.

Materials

- real leaves, silk leaves, laminated leaf patterns (pages 94–96), or leaves.pdf on CD
- graphing mat (commercial or shower curtain with floor tape to indicate the rows and columns)

Directions for Teacher/Student

1. Label three rows on the graphing mat with the words and/or leaves to indicate the attribute being graphed. "red, orange, brown," or "large, medium, and small." Discuss the differences.
2. Have each student choose one leaf and place it in the correct column on the graphing mat.
3. Discuss the graphing results. Which column has the most leaves? Which column has the least leaves? Are any equal or the same?
4. Create a different graph. Label the rows with the names of different trees: Oak, Maple, and Birch and sort the leaves by species.
5. Ask students to suggest additional graphs.