

Learning with Leaves

Overview:

This pre-K activity guides you in using leaves as a tool for practicing basic math skills and introducing some plant science concepts.

Objective: To use leaves as a tool for practicing basic math skills.

Materials:

- A variety of leaves
- Plastic bags
- Paper plates
- Cardstock shape cutouts (circles, ovals, squares, triangles, hearts, and stars)
- Small blocks, stones, or dried beans
- Paper
- Paint

Explorations

1. Take a nature walk in your backyard or schoolyard and collect a variety of leaves and place in a plastic bag. Have each child collect 5-10 different leaves.

Back in the classroom, begin by counting the leaves. Next, ask students to group the leaves with similar shapes and place them on separate paper plates. Compare the leaf shapes to the cardstock cutouts. Give students time to share any matches they find.

Arrange the leaves by size from smallest to largest. To quantify the size differences, consider tracing the leaves on graph paper and counting squares. Older kids can go a step further and outline each leaf with dried pinto beans and compare the length of the perimeter of each leaf based on the number of beans needed. Which leaves have the longest perimeter?

Making Connections

1. Make paint prints of leaf by dipping individual leaves in paint and then making an impression on a piece of paper. Or, place leaves underneath a piece of paper and make rubbings using crayons. Both prints and rubbings will draw attention to leaf veins. Talk about veins and what they do (transport water and food throughout a plant).

Branching Out

1. Ask students to sort leaves by additional characteristics such as edges, colors, or vein patterns.
2. Create graphs sorting leaves by various characteristics such as size, shape, color.

Adapted from Sarah Pounders, National Gardening Association

