21. WHAT LEAF IS THIS?

Overview: This activity will provide opportunities to observe various leaf structures to found in the Garden.

Objective: Students will identify and classify leaves of desert plants,

Time needed: 1 hour

Group Size: 2-3

Age appropriateness: 3rd Grade and up

Site: any location

Background: The overall shape of a leaf gives clues to the tree's identity. For example, trees leaves may be long and slender, oval-shaped, round, triangular, flat, round, thick, thin, rough, waxy, etc. The shape of leaves may vary in many different ways. The edges or margins can also provide clues to the tree's identity. Some leaves are completely hairy, others are completely smooth. The leaves may be simple or compound and may be arranged on the stem in a variety of patterns.

Materials:

Provided at the Garden
Tree Identification Guide
Cactus Guide
Clipboards
Provided by the classroom teacher
Paper

Paper Pencil

Preparation: none required

Pre Activity: Conduct class presentations and discussions about plants and specifically leaf structures.

Procedure:

- 1. Divide students into groups.
- 2. Distribute clipboards, paper and pencils.
- 3. Students will draw and write detailed descriptions of a tree at the Garden paying special attention to its leaves.
- 4. After sketches are made, have students use the Field Guides to identify the trees in their drawings.
- 5. Conduct a class discussion about the different plants and their leaves that were found.
- 6. Have students develop a classification scheme for the leaves. Group them by size, shape, etc.

Modifications: Depending on time and students abilities, have students make more tree observations.

Extensions:

- 1. The sketches could be put into a book with students researching different plants and adding written information about the plant they drew.
- Using the guides, see if students can identify other plants in the Garden.
 Study the structures and function of tree leaves.

Reference List:

Easy Guide for Arizona Trees Easy Guide for Cactus Project Learning Tree

Time of Year: any

**This activity was adapted from "Name That Tree", Project Learning Tree