24. CACTUS KIDS

Overview: Students act out the way a saguaro cactus swells with rain and shrinks during drought.

Objective: To explain how a saguaro collects and stores water.

Time needed: Approximately 30 minutes.

Group Size: Large group

Age appropriateness: Elementary

Site: Saguaro Life Cycle Display

Background: A saguaro is able to collect and store water in times of drought. The cactus is able to collect water through a huge network of shallow roots that grow away from its trunk in every direction. Because the roots are close to the surface, the roots can soak up a lot of rain quickly--before the sun comes out again and all the rain water dries up. The saguaro is able to store the water because it can expand its trunk or swells. The waxy surface of the cactus helps the plant keep its water by preventing transpiration from occurring.

Materials:

Provided at the Garden

Class set of laminated copies of the poem "The Saguaro".

Provided by the classroom teacher

Piece of paper folded like a fan that has been stapled into a cylinder.

Preparation: Create the cylinder with fan folds to represent the saguaro.

Pre Activity: Discsuss the life cycle of saguaro cactus and remains at the cite just prior to the activity.

Procedure:

- 1. Show the students the ridges and root system of the example saguaro at the cite.
- 2. Discuss the information given in the background of this lesson.
- 3. Demonstrate how a saguaro swells by putting your hands up through the center of the cylinder provided. Hold the cylinder straight up and down so that one side is facing the kids. Then press outward with your fingers so that the pleats "unfold" and become less noticeable.
- 4. Demonstrate how a saguaro shrinks as the water is used in a drought period. Withdraw your hand from the cylinder and push the pleats back into place to show what the saguaro looks like when it shrinks down again.
- 5. Passout and chant read the poem "The Saguaro" together as a class.
- 6. Explain that now the students will act out the process a saguaro undergoes while storing and using water
- 7. Students should stand in a circle with back facing inward at the area of the saguaro display.
- 8. Students should extend arms outward and touch the backs of the hands of the students by them. This will form the pleats of the cactus.

9. The teacher then instructs the group to imagine that they're all part of a huge saguaro that is growing right up through the group's center. Students then move inward and make ridges as the saguaro shrinks. 10. After the students have practiced the movements a few times, have them try the movements as you read the poem.

Modifications: None.

Extensions: Have the students write their own poem describing an item in the desert habitat. Have the students perform the poem to music or rap. Have the students draw a picture of a saguaro in a rainy season or a drought season.

Reference List:

Discovering Deserts, Nature Scope, 1989, p.19.

Time of Year: any time

**This activity was adapted from Discovering Deserts, Nature Scope.

THE SAGUARO

I live in the desert Where the sun brightly shines, I've got ridges and grooves And a lot of sharp spines.

My roots don't grow deep But they spread far and wide, To soak up the rain That I'll store deep inside.

My body starts swelling Before the rain stops, It swells and it swells As I soak up each drop.

In times without rain I get thinner each day, As I use up the water That I've stored away.