

### 13. WEB OF LIFE

**Overview:** Students will do an activity that will help them discover ways that plants and animals are connected to each other.

**Objective:** Students will observe how animals and plants are interdependent and need each other for survival.

**Time needed:** 45 minutes to 1 hour

**Group Size:** 10 to whole class

**Age appropriateness:** any grade

**Site:** any location

**Background:** The desert is a living community of plants and animals who depend on each other for food and shelter. Their habitats may have been adapted to the environment in which they live. Prior knowledge of desert animals and adaptations will make this activity more successful. Adaptations include size, color, water usage or storage, speed, body structure, and nocturnal behaviors. Students should research these before doing this activity.

**Materials:**

Provided at the Garden

Ball of rope or string

Field Guides

Provided by the classroom teacher

White board or flip chart with markers

Drawing paper for each student and crayons or pencils

**Preparation:**

**Pre Activity:** A study of plant and animal interdependency in an ecosystem should precede this activity to make it successful.

**Procedure:**

1. Brainstorm a list of desert plants and animals.
2. Students each pick a plant or animal they want to be.
3. They then draw and label a picture of the plant or animal on their piece of drawing paper.
4. Their drawing is then taped to the front of their shirt.
5. Gather the students into a circle.
6. Starting with any student, they will take the ball of string and pass it across the circle to the plant or animal that they eat or in some way depend upon.
7. The ball is passed and each student holds onto the string as they pass it on.
8. This will continue until all students are linked together in this ecosystem.
9. Have students step back until the web of string is taught.

10. Tell students to keep still but if they feel a tug, they should tug gently in response. Vibrations will be spread throughout the food web until all are tugging and the whole web is shaking.
11. Discuss how this tugging demonstration might illustrate what happens when one of the links in an ecosystem is damaged through natural or human made stress.
12. Ask students to pick one organism that they feel is least important and have that person let go of the rope and drop out of the web.
13. Ask if any other organism should drop out because they depended on that organism that was dropped.
14. After several rounds of this, students will see what happens when we remove a link in the ecosystem.
15. Discuss the following questions with the group:
  - What happens when we remove a link in the ecosystem?
  - Were the changes more dramatic when the ecosystem was composed of many parts or when it had fewer parts?
  - What can we say about the relationship between how many parts the system has and how stable it is?

**Modifications:** This activity can be kept as simple or made as complex as your group dictates.

**Extensions:** Create an imaginary animal using specified adaptations and research to see if other animals have any of these adaptations. Students could do creative writing or poetry based on this learning experience of plant and animal dependency.

**Reference List:**

Project Learning Tree  
Discovering Deserts, Nature Scope  
Project WILD  
Insects of the Southwest  
Assorted Field Guides

**Time of Year:** any time

**\*\*This activity was adapted from Project Learning Tree, "Web of Life".**