

# Lesson 7: Web of Life Game

## Preparation:

A set of 20 index cards with the names of various plants, animals and ecosystem resources written on them (one on each card). (Sample set: Sun, algae, plankton, leeches, minnows, mollusk, frog, salamander, mayfly, caddisfly larva, dragonfly, garter snake, crayfish, snail, trout, otter, worm, bacteria, damselfly, mink, bird).

## Materials:

- Index cards (see above)
- Ball of string or twine

## Standard Correlations:

*For a complete description of the standards, please see Additional Resources.*

**New York State: Standard 4/The Living Environment:** (6) Plants and animals depend on each other and their physical environment. Students describe the flow of energy through food chains and food webs.

**New York City: Standard S2 d:** The student produces evidence that demonstrates understanding of populations and ecosystems, such as the roles of producers, consumers, and decomposers in a food web; and the effects of resources and energy transfer on populations.

## Procedure:

- 1 Review with students how energy moves through a food web. Explain that the activity they will do helps demonstrate the connection among members of an ecosystem. Have a group of 20 students make a large circle. (The rest of the class can stand on the outside of the circle.) Distribute one card to each student.
- 2 Give the ball of string to the student with the Sun card. Have the Sun choose an organism that is dependent on it for survival (plant). The Sun should retain the end of the string and pass the ball to the plant creating the first string of the web. The plant chooses an organism that is dependent on it for survival (insect) and passes the ball to the insect.
- 3 After students have passed the ball several times, suggest to them that the organism holding the string has just died. Ask: What eats dead matter? (insects, worms) The organism holding the ball passes it on to an insect or earthworm. The game continues until all the students are holding the string by at least one point. There will be a large web of string in the circle.
- 4 Discuss with students what they observe about the activity. Ask what would happen if one of the organisms disappeared. To demonstrate, ask the student who has passed the ball of string most often to drop it. Have students directly affected by the loss gently tug the string. As the slack is taken up, ask other students to gently tug as the string as well until all of the students are affected.
- 5 After the activity, discuss what affect the loss of even the smallest organism will have on the food web. Ask: What do you think would happen if the acid rain or some other environmental pollution prevented the hatching of the insect larvae?





