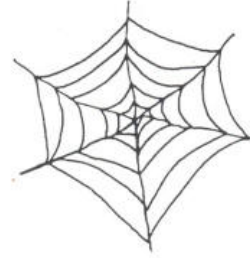


THE WEB OF LIFE

Activity 36

AGE LEVEL = 7-10 (5-12)
DURATION = 15-20 min.
LEARNING STATION = Anywhere
RELATED ACTIVITIES = \longleftrightarrow Pyramid of Life
 \leftarrow Ecosystem Chorus \rightarrow Predator-Prey

WHEN =



UNDERSTANDING: The parts of all ecosystems are connected and interdependent. When one part is missing, others may suffer.

MATERIALS:

- Ball of yarn
- Laminated photographs or drawings of ecosystem parts (sun, soil, plants, animals, water, decomposers, etc.)

PREPARATION: None

LESSON:

Warm-up: Have the children discuss people in their community. Who are they? What role do they play? How does their work help others in the community? After you have compiled a thorough list, examine the interdependence among them. Discuss the implications if people didn't fulfill their roles (i.e., grocers shutting their stores = harder to acquire food).

Activity: Have the children stand in a large circle. Explain that the game they're going to play shows how parts of natural communities and ecosystems depend on each other.

Ask: "What's the source of almost all of the energy on earth?" (The sun.) Have the child who answered correctly be the sun and hand them the ball of yarn. Then ask: "What depends on the sun to make food?" (plants). "Can anyone name a plant?" Have the sun toss the ball of yarn to the plant-child, while holding onto one end. Then ask who is dependent on this plant (for food, shelter, warmth, building material, protection, etc.). When a child answers, toss them the yarn and have them explain their connection. Continue connecting the children with the yarn as their interdependence and relationships emerge. Have each child explain their connection. Be sure to include all ecosystem parts in the web (soil, water, air, decomposers, people, etc.). As you connect the web, keep the yarn on top of the web so that it is easier to untangle after you have completed the activity. Have the children pull up the slack and raise the web above their heads and look through it. Bring the web back down, warning them to hold on tightly to their yarn.

Wrap-up: Pluck on the yarn and note how strongly connected everyone is. Then introduce a threat to the web (unsafe drinking water due to groundwater contamination; extinction of one of the animals due to loss of habitat). Have the effected individuals drop the yarn. Has anyone else's yarn become loose? If so, have them let go also. Continue the process until everyone is unconnected.

Conclude with this short analogy comparing an airplane to an ecosystem.

"In many ways an airplane is like our Web of Life. An airplane can still fly even if it loses a few rivets from its wing. How many of those rivets can we lose before the wing falls off and the plane crashes? No one knows. Do we want to find out only after a disaster? Should we replace lost rivets? Can we afford to lose any Web of Life members? Do we know which 'natural rivets' are expendable and which are essential? Can we replace them as easily as the rivets on a wing?"

OPTIONS AND FURTHER EXPLORATIONS:

1. Have the children choose an ecosystem part from the laminated cards. Run the activity the same way with the ecosystem parts pre-chosen.
2. This can be done as an introductory activity to the study of endangered plants and animals of Maine. For more information, contact the Maine Department of Inland Fisheries and Wildlife or Marine Resources. ([See list in Leader's Guide.](#))