Web of Life activity

Ideal group size:
Groups of five to 30 students

Suggested grades:
2nd & up

Venue:
Indoor/outdoor

Time:
Depends on group size, roughly 20–30 minutes

Materials needed:
*Large ball(s) of different-colored yarn
*Notecards with pictures of herbivores, carnivores, omnivores

Space:
Enough for the group to form a circle

Goal:
For participants to visually see how different animals are connected through food webs.

Setup:
1. Create cards with pictures of herbivores, carnivores and omnivores that are connected through predator/prey relationships in a particular food chain. Be sure to add a piece of string or make the cards adhesive so that participants’ hands can be free during the activity. If you would prefer to use pre-made cards, some can be found at the UAF Sea Grant website: http://aswc.seagrant.uaf.edu/images/stories/grade4/foodchain_cards.pdf.

2. Clear a space large enough for your group to form a circle. You may want to break large groups into smaller ones to increase the degree of participation in the activity.

Instructions:
1. Give each student a card.
2. Hand a ball of yarn to the largest predator in each food chain.
3. Have that student hold onto the end of the yarn and, while staying still in their place within the circle, toss (while continuing to hold onto their end) the ball of yarn to another student holding a card with a picture of the prey item they would eat. They will now be linked via yarn. For example, a shark might eat a seal so the shark would throw the ball of yarn to a seal.

4. The student who caught the ball of yarn makes sure their link to the student who tossed them the ball is secure. They then hold onto the yarn and toss the ball to a student with a card depicting something they eat. In the above example, a seal might eat a fish. Therefore, the shark, seal and fish would now be connected via yarn. Note: Animals that are eaten by omnivores could end up holding more than one color of yarn.

5. Once everyone is connected, choose one person to tug the piece of yarn they are holding. Have everyone who felt that tug raise his or her hands. Have those that raised their hands tug on their yarn. Have everyone who felt that tug raise his or her hands. And so on and so on until everyone’s hand is raised. Instruct everyone to put their hands down and explain that we just saw that every organism in a marine food web is somehow connected.
Web of Life activity

6. Ask the students, “How can we show what could happen if one kind of plant or animal died?” Have one student drop their yarn, and ask “If that animal/plant is gone, who may have trouble getting enough food?” Anyone else who felt their yarn go limp should also drop their yarn. And so on and so on until no one is holding yarn. This is an example of how the loss of one species can affect many species within the food web. Explain that the reason that they felt the yarn drop is because something within the system that they had a relationship with (be it food or shelter or predation) had been affected.

Extensions & variations:

- Have the students create the animal cards you use and connect them through the food web.

- Add man or plants to the food web. How are they connected and linked to all other animals within the web?

- Have students research the specific animal or plant card they receive.

- Collect the cards and redistribute them by taping one to each child’s back. Students should walk around the room and ask yes or no questions to try to guess what species they are. Examples of questions may include: Am I a predator? Would an otter eat me? Am I an herbivore? Can I breathe above water?