

Going Further

The Web of Life

Purpose

A classroom game to demonstrate the balance of life in the ocean.

Materials

- ball of yarn
- [species cards](#)
- safety pins

Background Information

Either directly or indirectly, almost every animal in the ocean depends on microscopic phytoplankton for food. These tiny plants form the base of nearly every food chain in the ocean. Plants use energy from the sun to make their own food through photosynthesis. In turn, some animals eat plants, and other animals eat the plant-eating animals.

Procedure

1. Hand out the role cards and ask students to sit in a circle wearing the card pinned to their shirt.
2. Ask the students to identify which organisms rely directly on the sun for their growth and nutrition. The student that represents the sun holds a ball of yarn and passes it to one of the members identified. For example, if the plankton are identified as needing the sun for nutrients, then the ball of yarn is passed to one of the students labeled "plankton", while the sun continues to hold the end of the yarn.
3. Ask the students to identify which organisms rely on plankton and repeat the questioning and passing of the yarn until the each level of the web is identified. Having the students describe their roles to the class during the game will help build a better understanding of the interdependence between roles in each web.
4. Eventually, everyone will be all tied together in a tangle of yarn. Some participants such as plankton may have the ball of yarn passed to them as part of several webs, indicating their importance to more than one species in the ecosystem.
5. Now cut the string at some point. The food web is broken. What might happen to the various organisms in the food web?

Going Further

- What happens if a member of the web disappears completely?
- Could any part of the web be replaced? If so, with what?

- Are any members of the web in competition with one another? How and for what?
- How do people influence the food chain?