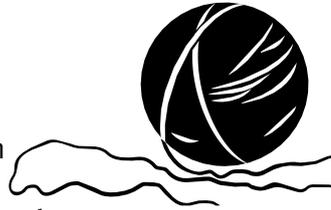


This activity may be done prior to your beachcombing field trip, to assess participant prior knowledge and experience, or after the field trip, as a way of recording the information they have gained.

## INSTRUCTIONS

1. **Choose your habitat – Sandy Beach or Limestone Rocky Shore.**
2. Using the 'Coastal and Marine Life' section of the education kit and other available resources, **allow participants time to research as many organisms and creatures that live on your chosen habitat as they can.**
  - a. Provide a guide to the types of things to look for: phytoplankton, zooplankton, algae, mussel, shrimp, crab, squid, fish, gull, etc.
  - b. Encourage the participants to find others not mentioned.
  - c. Participants should identify the food source for each organism or creature they research. In other words, who eats whom?
3. **Discussion:**
  - a. Ask participants to name the animals they have researched and record them on the board.
  - b. Ask what food each animal eats and also what eats that animal.
  - c. Continue to expand the food chain in both directions.
  - d. Ask participants to think of other examples of food chains that might exist in the chosen habitat.
  - e. Begin with a different creature and repeat the exercise.
4. **Suggest that food chains are never simple, and discuss reasons for this, e.g. animals other than mussels eat algae, and people and other animals eat squid.**
5. **Provide half the participants with tags naming different organisms that inhabit the chosen habitat, e.g. phytoplankton, zooplankton, algae, mussel, shrimp, crab, squid, fish, gull, etc.**
6. **Provide the rest of the participants with tags naming other elements that affect the chosen habitat, e.g. sun, air, water, limestone rocky shore, etc.**



## MATERIALS

Labels  
(one per student)  
Large ball of string

7. **Each participant represents a part of the environment.** The ball of string will be used to show how different parts of the environment are connected.
8. **Ask the participants to stand in a circle.**
  - a. Begin by asking the 'sun' to hold the end of the string because it provides the energy for the plants to grow.
  - b. Ask the participants "what relies on the sun to make food?" The 'sun' can then unroll the ball of string and pass it to either the 'phytoplankton' or the 'algae', while not moving from their original position in the circle.
  - c. Ask the participants "what is dependent on the phytoplankton or algae?" When a participant answers, unroll some more string to make the connection.
  - d. Continue making 'connections' using suggestions from the participants. As you make the connections in the web, ask the participants to keep the yarn on the top of the web, as it will be easier to untangle at the completion of the activity. The string represents 'the web of life' once all the connections are complete.
9. Ask the 'sun' to pull on the string, and tell the other participants to pull when they feel a tug. **What happens? How are all of the elements of the habitat connected?**
10. **Use this activity to continue the analogy, and discuss what might happen in different hypothetical situations, e.g. if the water was polluted or an animal or plant was lost from the food web.**