

The Marine Food Web

Grades: 5-8

Materials

- Animal pictures with fact card
- Crayons/coloring pencils
- Tape
- A laminated ocean mural
- String ball

Topics:

- Help students learn about the food web and energy flow in the ocean
- Gain some information of predation.

Description:

Part 1. Hold a classroom discussion about food webs and energy flow, and let the student fulfill student sheet part 1.

Part 2. We offer a blank picture of the **seafloor**, and students will fill the food web with the **animal cards**, making appropriate connections between the various organisms and correctly labeling producers, consumers and decomposers, herbivores and carnivores.

Part 3. Have students create a **name tag** for themselves with the name of their organism and a picture if they desire. Wearing the nametags, form a circle and, tossing a ball of string, make connections between organisms in the food web. Ask the students to describe the nature of the relation between their organism and the organism they choose to throw the ball of yarn to. Once you have a nice web with lots of wonderful connections, ask some part of the web (primary producers, for instance) to let go. Observe what happens to your beautiful web.

From <http://www.lobsters.org/loblit/foodweb.html>, Feb 11th 2007

The Marine Food Web

Students Sheet

Part 1

Fulfill this list by the name of animals!

Phytoplankton:	
Zooplankton	
Filter-feeding fish	
Large carnivorous animals	
Decomposers and detritus eaters	

Part 2

Fill the food web with the **animal cards**, making appropriate connections between the various organisms and correctly labeling producers, consumers and decomposers, herbivores and carnivores.

Part 3. Finish a **nametag** for yourself with the name of one organism and a picture if you want. Wearing the nametags, form a circle and, tossing a ball of string, make connections between organisms in the food web. Describe the nature of the relation between you and others you chosen to throw the ball of yarn to. Once you have a nice web with lots of wonderful connections, ask some part of the web (primary producers, for instance) to let go. Observe what happens to your beautiful web.

Hey!

I am _____.

Marine Organisms



Mussel



Killer Whale

Krill



Diatoms



Kelp



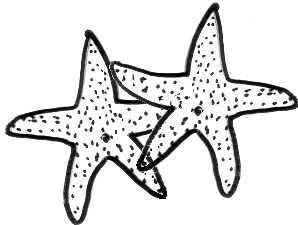
Copepod



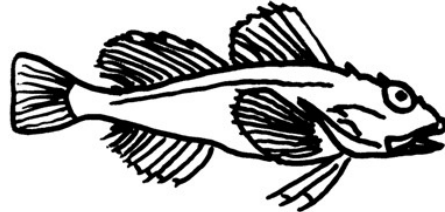
Octopus



Marine Bacteria

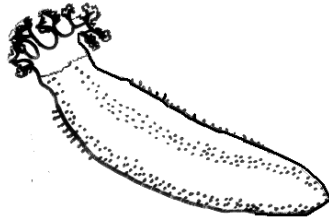


Northern Sea Star

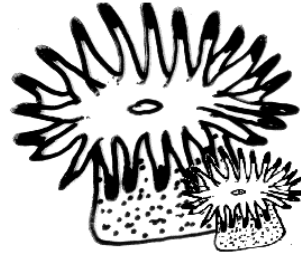


Sculpin

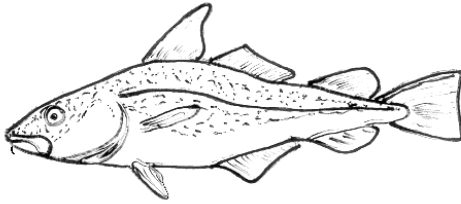
Marine Organisms



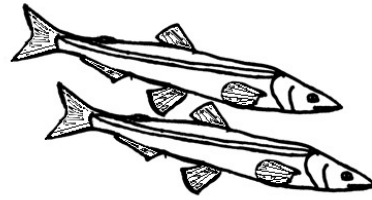
Sea Cucumber



Anemone



Cod



Capelin



Sea Urchin



Welk



Shrimp



Lobster



Puffin



Brittle Star

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Answer key for Teachers

Background Information

All living things need energy to grow, reproduce and survive. The energy begins with the sun. Plants trap the solar energy and, through photosynthesis, convert it into the sugars that are their food. Animals eat the plants, taking some of that sun-harvested energy into themselves. Other animals eat those animals. This is the formation of food web, and the energy is flowing along the food chains.

Almost all food chains begin with producers harvesting energy from the sun. From there the energy is passed from producers to consumers: herbivores, carnivores, and omnivores. When these die the energy passes to scavengers and decomposers, and back into the soil. Decomposers, as the last step to replenishing the soil, are both the end and the beginning of any food chain.

Part 1

Phytoplankton:	Diatoms Dinoflagellates
Zooplankton	Copepods Crab Fish Lobster larvae
Filter-feeding fish	Herring Basking shark
Large carnivorous animals	Mackerel Bluefish Tuna Jellyfish Sea turtles Adult lobsters
Decomposers and detritus eaters	Worm Bacteria

To determine what each organism eats, we recommend these books:

Robins, C.R., Ray, G.C., Douglass, J. 1986. Peterson field guides - Atlantic coast fishes. Houghton Mifflin Company, New York, NY.

Gosner, K.L. 1978. Peterson field guides – Atlantic seashore. Houghton Mifflin Company, New York, NY.