

Food Web Fun

Grades: K-1

Objective:

Students will discover the food/energy relationships in a coral reef habitat's food web.

Materials:

yarn
flannelboard pieces (use patterns on page 10)
flannelboard

Action:

1. Using the pictures on page 10 as patterns, make flannelboard pieces out of felt or pellon (available at most fabric stores). Place the pieces on the board in the pattern shown in the diagram on page 9. Measure and cut yarn to lengths that will connect the creatures as shown on page 9. Remove the yarn and flannel pieces.
2. Define a food web for your students: write the words phytoplankton, jellyfish, and sea turtle on the board and draw pictures to symbolize each one. Share with students the idea that phytoplankton gets its energy from the sun, the jellyfish gets energy by eating the phytoplankton, and then the sea turtle gets its energy by eating the jellyfish. Explain that most animals eat more than one thing. Tell them that the transfer of energy through food between life-forms in an ecosystem is called a *food web*.
3. Gather students in a circle around the flannelboard. Place flannel pieces around the perimeter of the board. Name each organism as you put it up, and explain what it might eat.
4. Ask students to help you remember what was at the beginning of the food chain you put on the chalkboard. Invite the student who answers correctly to come up and move the sun from the edge of the board to the center.
5. Lead students through a simple coral reef food chain by asking them which organism they think is the next link in the chain. Have the student who provides the correct answer move the flannel piece from the edge of the board to its proper place in the chain.
6. Once the simple chain is in place, direct student helpers to place the remaining creatures either "next to," "above," or "below" others in the chain. Use the pieces of yarn to show the connections between organisms. Explain to your students that the pattern of what eats what is called a food web.
7. Help your students understand that they're also part of a food web. Ask students to name something they might eat for dinner. Lead them through a chain that brings that food to them. For example:
 - a. Hamburger: "Is hamburger a vegetable or a meat?" (*meat*) "What kind of animal does it come from?" (*a cow*) "What does a cow eat?" (*grass and hay*) "Do grass and hay eat anything?" (*no, plants get their energy from the sun*) So, the food chain is: sun-grass-cow-you.
 - b. Green beans: "Are green beans a meat or a plant?" (*plant*) "Do green beans eat anything?" (*no, plants get their energy from the sun*) So, the food chain is: sun-green beans-you.

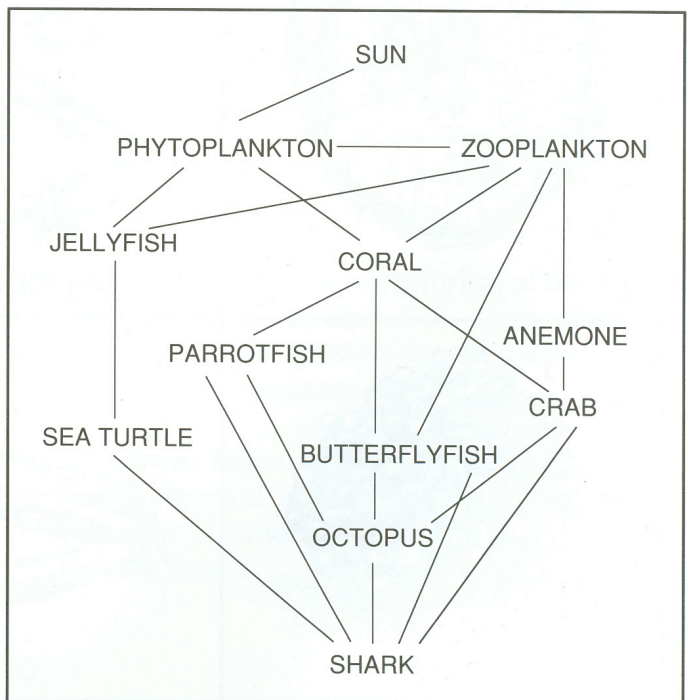
Grades: 2-3

Materials:

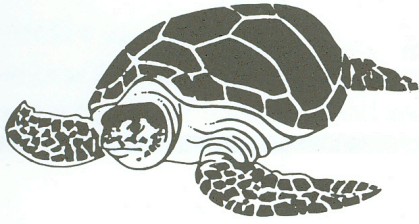
Copies of page 10 enlarged 200% (1 per student)
crayons or markers
scissors
tape or tacky gum

Action:

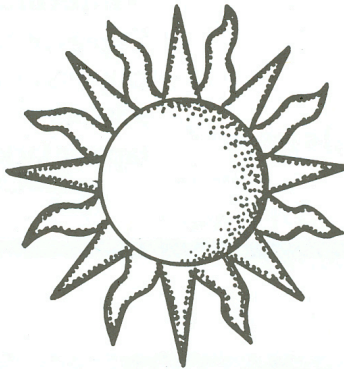
1. Define a food web for your students: write the words phytoplankton, jellyfish, and sea turtle on the board and draw pictures to symbolize each one. Share with students the idea that phytoplankton gets its energy from the sun, the jellyfish gets energy by eating the phytoplankton, and then the sea turtle gets its energy by eating the jellyfish. Explain that most animals eat more than one thing. Tell them that the transfer of energy through food between life-forms in an ecosystem is called a *food web*.
2. Give each student a copy of page 10 and identify what each card represents (sun, phytoplankton, coral, fish, etc.) Invite students to color and cut out the cards.
3. Use a set of cards that you've made yourself to demonstrate what a coral reef food web looks like (see diagram at the bottom of this page). Encourage students to use their cards to follow along. Use tape or tacky gum to post the cards on a wall or board where they can be easily seen. Place the sun up on the board first, then follow the order as shown below.
4. Invite students to find a partner to play the card game with. Have them use only one person's deck of cards.
5. To play the card game:
 - a. Students shuffle and divide the cards between them.
 - b. Whoever has the sun in her/his hand goes first. That person lays the sun card down between the two players.
 - c. If the other player has a card that gets energy from the sun, she/he places it beside the sun card. If not, that person loses a turn.
 - d. Players continue laying down cards to form a food web until all the cards are gone. If they forget what eats what, they should consult the cards posted on the board.
6. Students can take their cards home to show their families what a food web is, and teach them how to play the game.



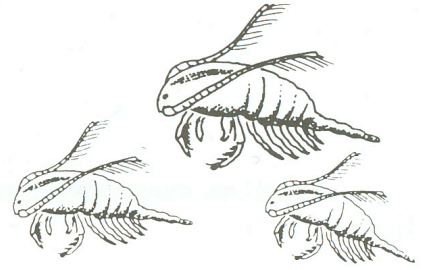
Food Web Cards



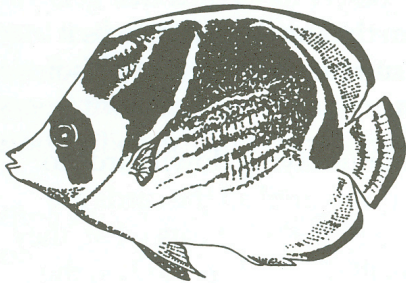
sea turtle



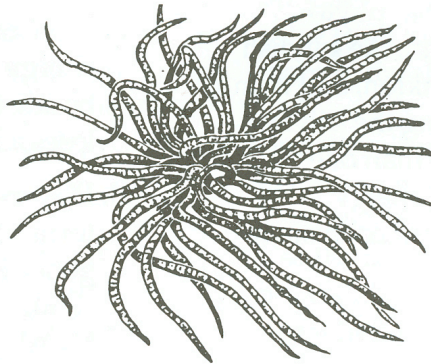
sun



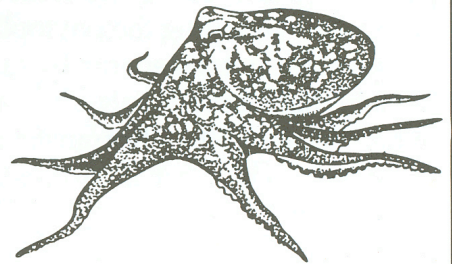
zooplankton



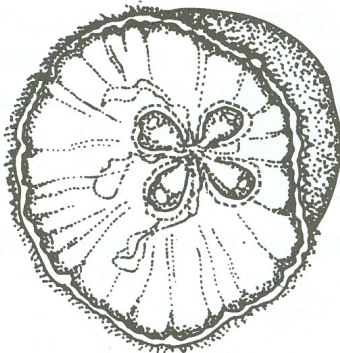
butterflyfish



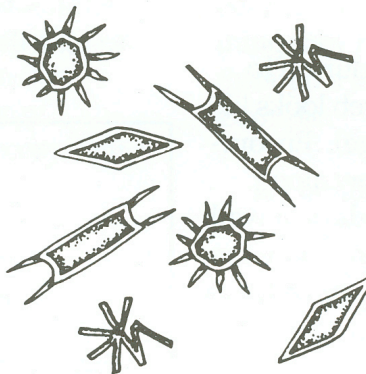
anemone



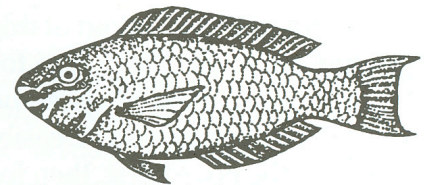
octopus



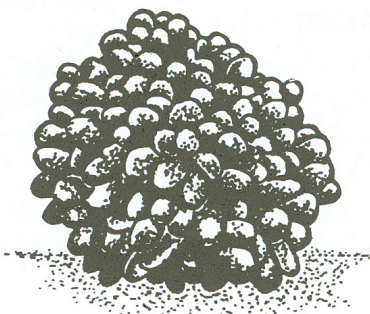
jellyfish



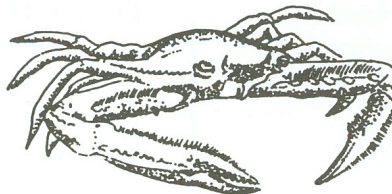
phytoplankton



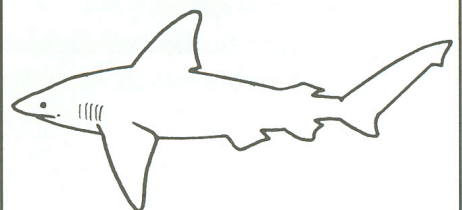
parrotfish



coral



crab



shark