



CORAL REEF ECOLOGY

Concepts

Coral polyp foraging is affected by its environment. Their symbiotic relationship with algae is important for nourishment.

HCPS III Benchmarks

SC 4.3.2

Duration

30 minutes

Source Material

PRISM

MARE

Vocabulary

Foraging

Symbiosis

Mealtime for Corals

Summary

Students will play an interactive game in order to demonstrate how coral polyps in a coral colony feed, thereby exhibiting the symbiotic relationship between coral polyps and zooxanthellae.

Objectives

- Students will demonstrate that individual polyps, though connected, feed independently in a coral colony

Materials

An old bed sheet

Surgical gloves for every child in the class

Markers

Goldfish crackers

Coral Comics worksheet

Making Connections

Students will see how coral polyps feed by acting like a polyp and using familiar materials. Students will build upon their existing knowledge of coral polyp foraging and feeding.

Teacher Prep for Activity

Cut X's in several places in an old bedsheets to create holes large enough for children's hands to fit through. Photo copy the Coral Comics worksheet.

Background

No additional background is necessary.

Procedure

1. Give each child a surgical glove to represent one coral polyp. Discuss how much bigger their polyps are than a real coral polyp (usually about the size of an eraser on the end of a pencil).
2. Explain that coral polyps live symbiotically with plants, single-celled algae called zooxanthellae. Students may choose to put dots of gold or green marker on their gloves to represent the zooxanthellae.
3. Have students crouch beneath the sheet that is suspended between chairs or desks. You can't fit the whole class under one bedsheets, so you may take turns or use several sheets to do the feeding activity.
4. Have the students reach up through the holes in the sheet and feed them goldfish crackers or bits of sandwiches. In order to eat, they will have to pull it back through the sheet.



5. After the demonstration, have a discussion with the class on how polyps eat.

Homework: Have students write a comic strip about coral wars and coral death. Have students create what they think would occur on a coral reef when fighting for food and space occurs (after they saw the feeding demonstration).

Note: Talk about comic strips, bring in and study comic strips, review dialogue and quotation marks prior to homework assignment.

Assessments

Discussion and Coral Comics worksheet completed

Resources

Source: Excerpted from Science and Children's Literature by Mary Cerullo, published by Heinemann, Portsmouth, New Hampshire. Used with permission.



Write a comic about life on a coral reef. For example your comic can include the coral wars and coral death/rebirth that occur on a reef when fighting for space and food occurs, or perhaps how corals feed or who corals interact with.

CORAL COMICS
