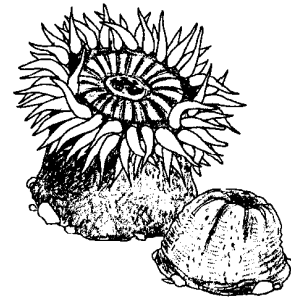


Sea Anemones

Lesson edited by Laurie Dumdie, Poulsbo, WA

Key Concepts

1. Aquatic organisms such as sea anemones adapt developmentally, structurally, functionally, and behaviorally to their environments.
2. A sea anemone uses its stinging tentacles for catching food and for protection and uses its sucker foot to attach itself to something hard.
3. Sea anemones change in appearance when their tentacles are pulled inside their body.



Background

Sea anemones are sometimes called the underwater flowers of the sea. However, they are not flowers at all but animals that look like beautiful flowers. They come in many shapes and colors (including different shades of red, green, orange, brown and white) and sometimes appear to be growing in gardens. With their one large sucker foot they can attach themselves almost anywhere. Some even attach themselves to rocks or other things after burrowing down deep into the sand.

A sea anemone usually does not move from one location to another, but on occasion they have been known to travel from one end of an aquarium to the other overnight.

Sea anemones apparently have few, if any, enemies. They have been known to live for at least 80 years while in captivity and have a variety of ways of reproducing themselves. Even so they don't seem to become overpopulated.

As a predator, the sea anemone often waits for long periods of time until some unsuspecting prey stumbles into its trap of stinging tentacles. Although these stinging cells are deadly to small fish and the like, they are completely harmless to the skin of even the most sensitive humans. When the tentacles of an anemone are touched it feels like the sticky side of Scotch tape as the stinging cells are discharged. When an anemone is touched, it will withdraw the tentacles into its body for protection.

If you are lucky enough to have a live sea anemone, have the students observe what happens when the tentacles are touched. The students may also wish to occasionally feed the sea anemone by placing small pieces of meat or clam etc. on the tentacles of the sea anemone and observe it taking food into its mouth.

The sea anemone is one of many marine animals that becomes exposed during a low tide, if it is not in a tidepool. An exposed sea anemone usually closes up (pull in all its tentacles) to trap water and moisture inside its body to provide oxygen and prevent it from drying out during low tide.

Materials

For the class:

- copies of the student worksheet, “Sea Anemones”

Teaching Hints

Sea anemones may be relatively unfamiliar to young children. As such, supplement the text and activities with pictures, and any available audio visual materials.

Duplicate the text pages. One set is recommended per student. Recognizing that the reading ability of first grade students varies dramatically over the course of the school year, give thought to the best way to complete the activity with your particular group of students. In the fall, you may wish to read the selections to your students, having them complete the requested actions on the activity sheet and answer the questions out loud. In the spring, you may wish to have them work in small groups or independently to complete the activity. Use the following as a guide for a discussion of the basic concepts covered in the reading:

Sea anemones _____ (action)

Sea anemones look like _____

Sea anemones are like a _____ because

Sea anemones are not like a _____ because

The “Key Words” should be taught if they are unfamiliar to the students.

Key Words

sea anemone - a marine animal, usually living attached to a hard surface, with a flexible, cylindrical, sac-like body and tentacles with stinging cells surrounding a central mouth

sting - to pierce or wound with a sharp pointed structure

tentacles - in sea anemones, elongated, flexible appendages with stinging cells used for feeding and protection

tide - the periodic variation in the surface level of the oceans and of bays, gulfs, inlets and tidal regions of rivers, caused by the gravitational attraction of the sun and moon

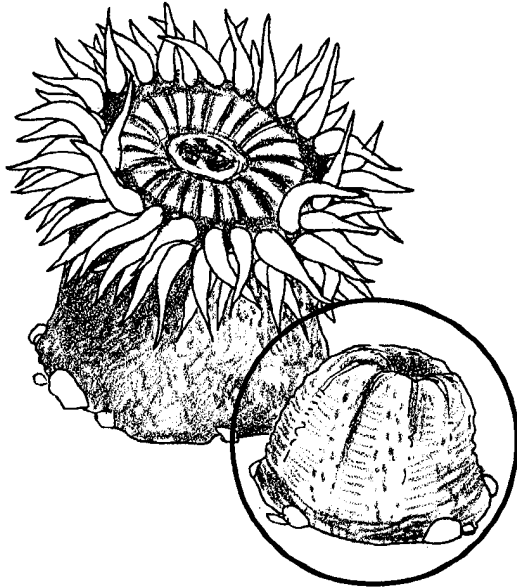
Extension

1. “Sea Anemones” provides opportunities for creative writing and creative dramatics. Have students:
 - write about “My day as a sea anemone”
 - move their body to show the actions of the tentacles of a sea anemone
 - role play a sea anemone at high, then at low tide

Answer Key

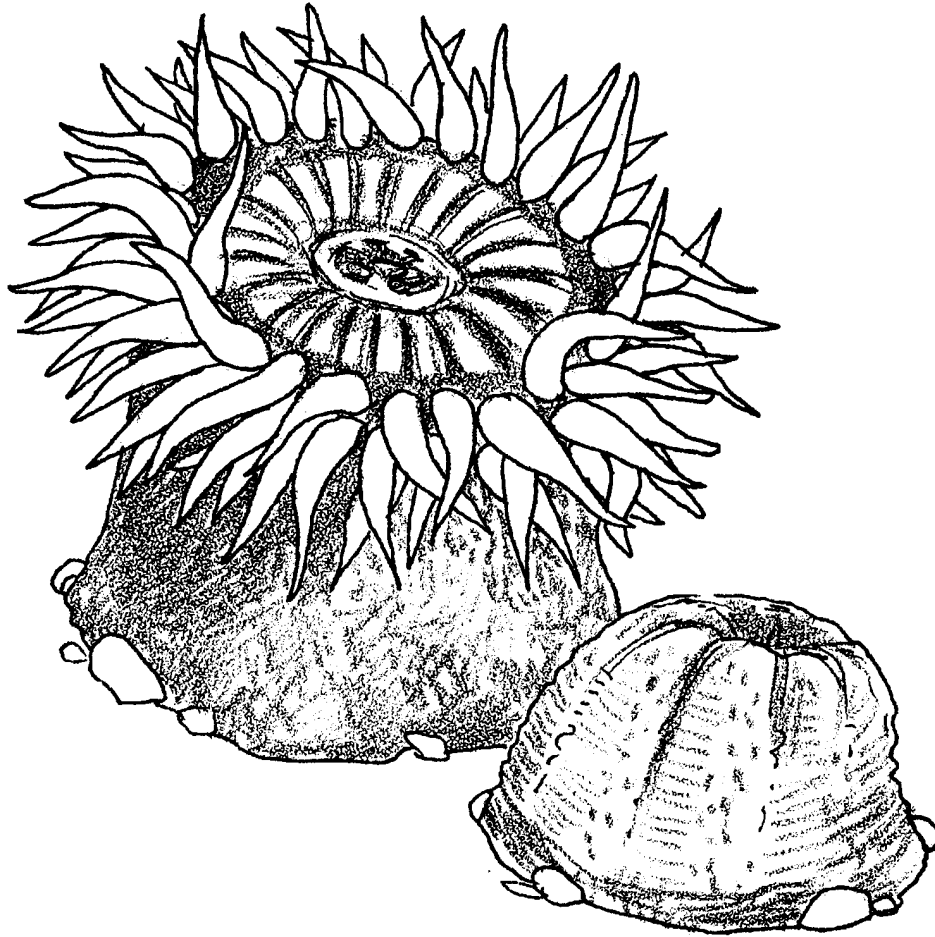
1. Answers may vary. Some may say sea anemones look like flowers. In fact, they are named after the anemone flower.
2. Answers may vary. The sea anemone benefits in at least two ways from living on the hermit crab shell: it obtains morsels of food that float its way as the crab feeds; and, it gets a free ride which helps spread the distribution of sea anemones.
3. Answers may vary. The anemone’s foot is used to hold on to rocks, docks, pilings or other hard surfaces.
4. Answers may vary. The body is tube-shaped.
5. Student drawings of a small fish on the anemone's tentacles will vary.

6.



7. Answers may vary. The shells and stones keep the anemone from drying out. They also help camouflage the anemone.

Sea Anemones



This is a sea anemone. It lives in salt water.

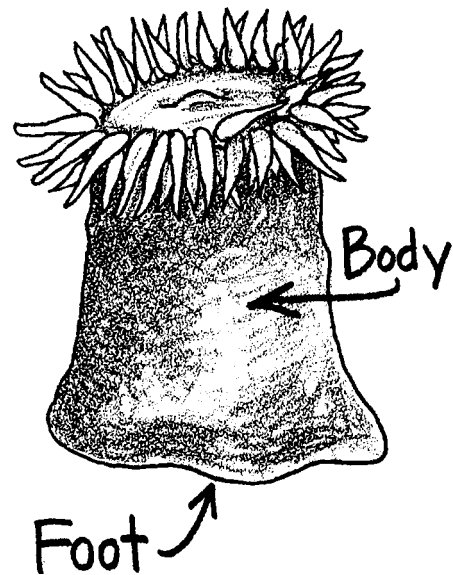
Some sea anemones are red. Others are yellow or green. Some are brown. Color the sea anemone.

1. What does it look like?

Many sea anemones live in tidepools. Others live on rocks. Some live on hermit crabs!

2. Why might the shell be a good place to live?

The sea anemone has a foot.



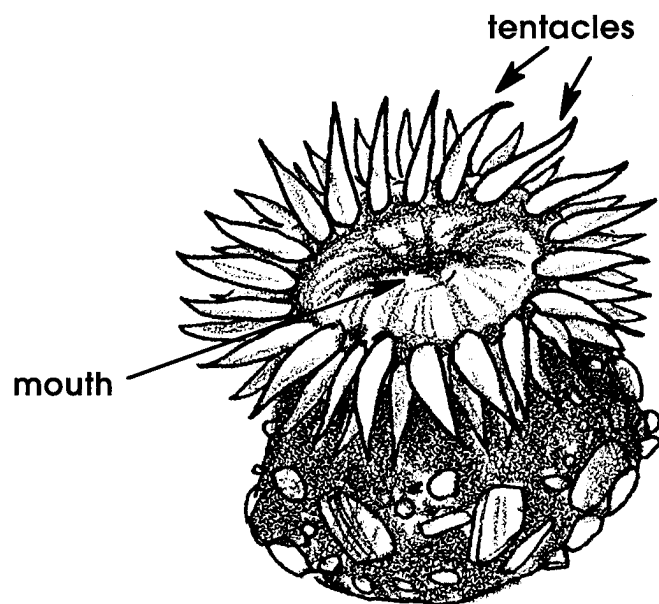
3. What do you think the foot is for?

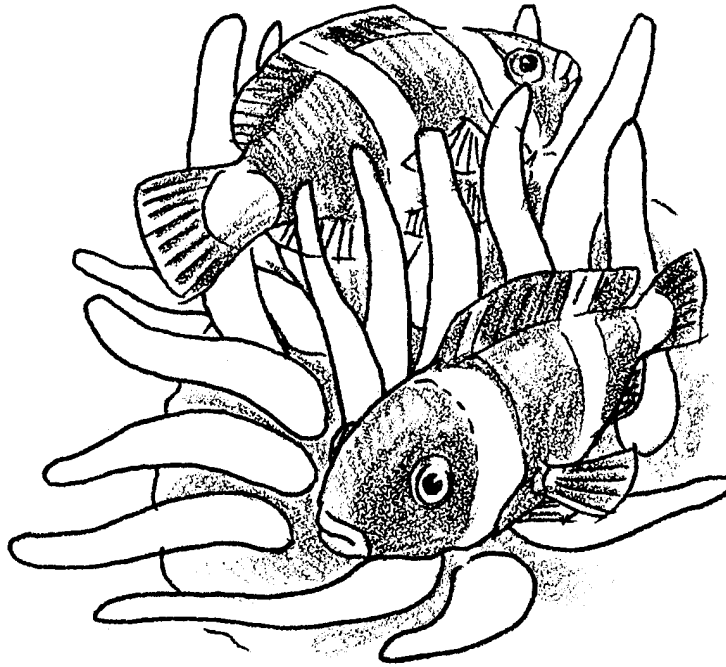
Look at the sea anemone's body.

4. What does the body look like?

Find the tentacles. They are on top of the body. They look like fingers. They can sting food. Sea anemones eat smaller sea animals.

5. Look at the drawing. Draw a small fish or snail on the tentacles.

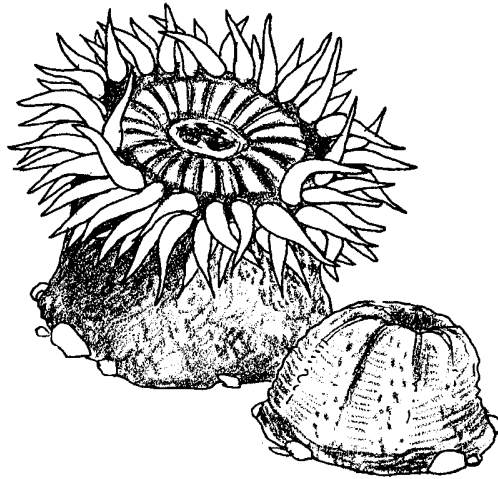




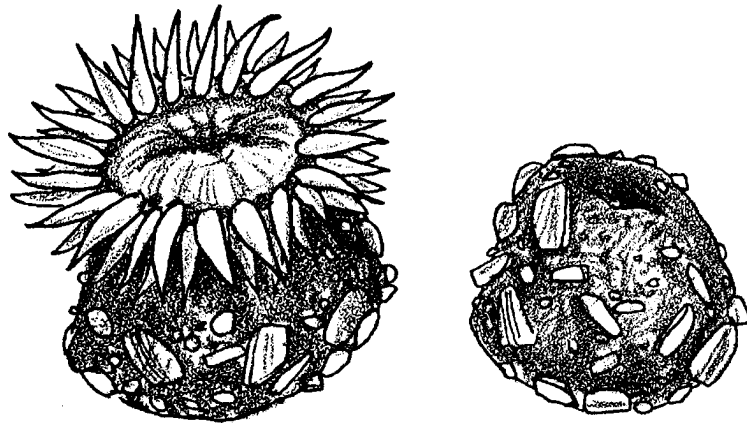
The anemone fish is special. It lives in the tentacles. But it doesn't get stung! Scientists ask, "Why not?" They have some ideas. What do you think?

Sea anemones can pull in their tentacles. They do this when in danger. They also do this when the tide is out. This keeps them from drying out. They look like a blob of jello.

6. Circle the sea anemone with its tentacles pulled in.



Some sea anemones are sticky. Shells and stones stick to them.



7. How do you think this helps the sea anemone?