Animal Disguises

Objective

The students will be able to demonstrate how cryptic coloration helps ocean animals survive.

Background

An animal that blends in with its environment and is hard to see has cryptic coloration. Cryptic coloration is an adaptation that helps many animals to avoid predators. Predators may not even notice that the animal is nearby. Cryptic coloration is also helpful for surprising prey-they don't know danger is nearby until it's too late.

Materials

For each student:

- ❑ one 8ó" x 11" *sh*eet of white construction paper
- ❑ two 6" lengths of yarn
- ❑ one sponge cut into a 1ó-inch square

For class:

- ❑ tissue paper in various colors
- ❑ fish pattern below
- ❑ white construction paper to cut 2 fish *per student*
- ❑ single-hole punch
- ❑ liquid starch
- ❑ small bowls to hold starch
- ❑ two large bags

Action

PREPARATION:

1. Cut tissue paper into 1" squares. Put dull-colored (green, brown, etc.) squares into one large bag and bright-colored (blue, red, yellow) squares into another.
2. Make a template of the fish pattern on the next page.

ACTION:

3. Students use the fish template to trace and cut out two construction paper fish. (For younger students, pre-cut the fish.) Next, give each student a piece of white construction paper.
4. Have students fold their paper in half width-wise. (The two short ends should meet.) Use a hole punch to punch a hole at the top of each fish and in the fold of the paper, about an inch from the top.
5. Give each student a sponge and set bowls of starch and tissue strips on table. They use the sponge to put small amounts of starch on their paper and stick on pieces of tissue, one at a time.
6. Working with their sponges, students cover half of the sheet of paper with dull-colored tissue squares to represent a kelp bed environment. They cover the other half with bright-colored tissue squares to represent a coral reef environment. Students also apply tissue to their fishes: they make one dull, kelp bed fish and one bright, coral reef fish.
7. After the papers and the fishes are dry, attach the two fishes to each student's paper with yarn, tying the yarn through the hole at the top of the paper.
8. Students make their fishes "swim" from one environment to another. They show how the dull-colored fish blends in with the kelp bed but not the coral reef. The brightly colored fish is hidden in the coral reef but not in the kelp bed.
9. Explain how the adaptations that help an animal survive in one environment might not be helpful if the environment changes.