

Camouflagery

Environmental Education Lesson
EDWARDS CAMP AND CONFERENCE CENTER

SUMMARY

Students will learn in this class how and why animals camouflage themselves.

USAGE

Kindergarten through 8th grade

OBJECTIVES

MATERIALS

- Pictures of animals “blending in”
- Pictures of animals using mimicry
- Dry erase board and markers
- Brown and White sheet

INTRODUCTION

Animals are masters of disguise. They use camouflage to hide themselves from predators, or to sneak up on prey. Through discussion, examples of live animals in Lakeside and games, students will learn how animals disguise themselves.

WARM-UP ACTIVITIES

Name Game

Start off by asking each student their name and their favorite animal. This will allow the instructor to learn names, but also to get the students thinking about animals.

DISCUSSION/ACTIVITIES

Predator/Prey

Go back around the class and ask them if they think their favorite animal is a predator or prey. Then begin a discussion about how that animal hunts their prey/ or hides from predators. What abilities do the animals have to keep them safe from being eaten or makes them able to catch their food? Write students answers on the whiteboard.

Camouflage

In the above discussion students will usually bring up camouflage as an ability animals have to hide from their predators or catch their prey. If not, the instructor can incorporate it into the conversation. Ask the students what camouflage means. (*answer: blend in with surroundings*)

Show students photos of animals “blending in”. Pass the photos around the class and have everyone try to identify the animal in the photo. After showing the photos ask the class what animals they found in the pictures. Then ask them how the animals blended in and what other ways animals can camouflage themselves. Write students answers on the whiteboard.

Typical answers:

Keep eyes closed

Keep still

Color

Spots

Hide

Live Animals (*only Edwards's staff may demonstrate this*)

After students have discussed ways in which animals camouflage themselves you can take out some of the live animals to show examples.

Painted Turtles: Top is dark colored, bottom light colored. Ask the students why they think this is. If predators are looking from above into the water, they see darkness. The top of the shell is therefore dark. If predators are looking from below in the water, they see light from the sun or moon. The bottom is therefore light. You may also talk about other features that help turtles get away from their prey, (slim-lined shell, and webbed feet to make them faster in the water)

Box Turtles: They have a hinged shell to allow them to completely shut themselves inside. When they do, what do they look like? (Most students will answer “rock”)

Amphibians: Discuss that amphibians must see their prey move. What can prey do to keep from being eaten? (stand still) What can amphibians do to catch their prey move? (hide). Demonstrate this with the American Toad (he likes to eat!). Put in a small container and feed 1-3 mealworms to demonstrate to students.

Mimicry

What is mimicry? Mimicry can make an animal appear as something else. Show pictures of animals that use mimicry. Ask students to explain why animals might use mimicry. Some answers from students or answers the instructor can incorporate into discussion are: bugs that look like leaves, colors may make an animal appear larger or more aggressive. Write students answers on the whiteboard.

Discuss the Monarch butterfly and the Viceroy butterfly. Monarchs taste bad to predators because they feed on milkweed, a poisonous plant, as caterpillars. The Viceroy looks like a monarch (except it has a v-shaped line in wings) but does not taste bad. Do you think predators would stay away from the Viceroy anyway?

Thicket Game

Students will become the animals they just discussed in class in this game about camouflage. A good area to play this game is the woods just past the end of the tube slides. Explain to the students that they will be rabbits hiding from their predator the fox. Ask students to tell you how they can keep from being seen. (This is to review what they learned in the classroom).

Explain the rules: there is no running. Designate boundaries. There will be one fox who must stay in a designated area (a small box made in the ground with sticks will work well). The fox will count to 15 while the rabbits hide themselves. After counting, the fox will open his/her eyes and without moving outside the box must try to spot rabbits. After spotting all the rabbits he/she can, the fox will close his eyes and count to 15 again. At this time, all rabbits remaining in the game must hide closer to the fox. The fox then opens his eyes and spots rabbits again. This will continue through one more round. After these 3 rounds all the remaining rabbits will stand up where they are and the closest to the fox will be the fox in the next game.

To make things more fun/interesting, bring a white sheet and a brown sheet. Give each to a student to hide with to demonstrate if the colors help or hurt the person trying to hide. Discuss whether it helped/hurt after the game.

You can play the game several times through as long as time permits.

WRAP-UP

After the last round of thicket is played bring the students together. Ask if it was easy or hard to hide from the fox. What helped them? What hurt them? Review how animals camouflage themselves in this manner. Then walk the group back up.