CLASSROOM CAMOUFLAGE

OBJECTIVE
Students will demonstrate their understanding of camouflage by designing a snake or butterfly that blends into a classroom "habitat."

MATERIALS
One box of assorted colored toothpicks
Outdoor grassy area or a large piece of fabric or indoor/outdoor grass
Paper snake or butterfly patterns for each student
Markers, crayons or colored pencils
Scissors

Note: A simple line drawing of a snake and of a butterfly appear at the end of this document. Copy them, one to a page, letting the individual students choose between doing a butterfly, snake, or iguana.

INSTRUCTIONS

Introduction to Camouflage:

1. Begin the lesson by presenting the students with a box of colored toothpicks. Make sure there are green toothpicks included in with the other colors!

2. Count how many toothpicks there are of each color; write the total for each color on the blackboard.

3. Spread the toothpicks randomly over a large area of grass or green indoor/outdoor grass. If no grass is available, use a bare patch of earth with some tan toothpicks, or a large piece of fabric with a background color the same as one of the colors of toothpicks.

4. Give the students 10 seconds to collect as many of the toothpicks as they can find.

5. Count the number of each color toothpick that the students retrieved. Compare this to your original count on the blackboard. Which toothpicks were the easiest to find? Which were more difficult? Why?
6. Introduce the concept of camouflage as an animal adaptation. Explain that many animals have colors or markings on their fur, feathers, scales or skin that enables them to blend in with their habitat (the place where that animal lives). Ask the students how camouflage helps an animal survive. Ask for examples (a motionless green frog at the edge of a pond; drab brown feathers on most incubating female birds; winter white/summer brown colors of the arctic fox and ptarmigan, etc.).

**Classroom Camouflage:**

1. Give each student a copy of the snake, butterfly or iguana pattern.

2. Ask the students to pretend your classroom is a wild habitat. Have them look around the room and select a specific home or habitat for his or her individual snake, butterfly or iguana.

3. Have each student color his or her animal pattern with markers, crayons or colored pencils so that it will be camouflaged in the habitat they selected.

4. Ask your students to place their animals in their habitat without burying them. The animals must be out in the open, hidden only by their coloring and patterns.

5. Invite students from another class to see how many of your animals they can find.

**EXTENSION**

Sometimes an animal's coloring or pattern does the opposite of camouflage. Instead, its markings or colors call attention to the animal. Colors may issue a warning to other species, or may attract members of the opposite sex of the same species (the bright colors of the South American arrow poison frog; the bright showy feathers of the male peacock).

Repeat the Classroom Camouflage activity by having students animals that do not blend in with their surroundings. Since they can't hide, how might they protect themselves from predators? What are some of the advantages and disadvantages of camouflage compared to advertising or warning coloration?

*Thanks to L.A. Zoo's "Wild About Science" program developed by Don Gere, and the Green Iguana Society (www.greenigusociety.com) for their permission to use their iguana drawing. Teachers, check with your local zoo for education programs for teachers.*