COLOR CRAZY

OBJECTIVE
Students will generalize that wildlife occurs in a wide variety of colors.

METHOD
Students create representations of colorful wild animals.

BACKGROUND
Nature is rich with color. Animal coloring has a wide variety of survival implications. For example, wildlife benefits from color for protection and as a way to attract mates. The colors that we see are not the same colors that all animals see. An animal's bright colors may not be visible to its primary predators.

Camouflage, or the ability to blend with surroundings, can determine whether a prey species, like a rabbit, remains hidden from a predator or is easily identified, killed and eaten. Many predators, such as leopards and trout, have camouflaged bodies so that their prey will not see them. Some animals go through seasonal color changes to remain camouflaged. For example, ptarmigans are ground-dwelling tundra birds. In winter, they are white and blend with the color of snow. In summer, they turn mottled brown and resemble their environment.

Many animals are brightly colored. The eastern newt in its land-dwelling juvenile, or eft stage, is a bright red salamander. That color warns predators because the newt's skin contains a toxin. A predator that eats a newt and finds it distasteful learns to avoid newts in the future. Unusual animal coloring can serve as a warning to predators much like a flashing yellow highway light advises motorists of a road hazard to avoid.

Age: Grades K-6
Subjects: Science, Language Arts, Art
Skills: description, drawing, generalization, invention, media construction, observation, reading, writing
Duration: 45 minutes
Group Size: any
Setting: indoors
Conceptual Framework Reference: I.B.4.
Key Vocabulary: color, wildlife
Appendices: Local Resources

Bright colors or other markings may also serve as a defense. Some animals use color to appear to be something that they are not. Polyphemus moths have giant eye spots that create the impression that the animal is larger than it really is. Some caterpillars have spots that make them look like they have two heads.

It is often theorized that color plays a role in animal mating. The brightly colored male scarlet tanager and peacock are two birds that are often given as examples of bright coloration used to attract mates. Female *Anolis* lizards have been shown to be more likely to approach red throated males than males with green painted throats.

We can see that wildlife occurs in a wide variety of colors. We do not know all the reasons and ways that color affects the lives of animals. No matter what the reasons, nature's colors can be interesting and inspirational. For wildlife, this variety is linked to survival.

The major purpose of this activity is for students to recognize that wildlife exists in a variety of colors.

MATERIALS
pictures of brightly colored animals such as coral reef fish, tropical birds and insects; crayons; paint; chalk; construction paper; scissors; glue
OPTIONAL: other brightly colored art construction material, like artificial feathers, tissue paper, acorn shells, uncooked noodles

PROCEDURE
1. Lead a discussion by asking students to name and describe real, brightly colored animals. Show students photographs of a variety of brightly colored animals. Discuss how the animals' colors and markings might help them survive.
2. This is a "Make A Colorful Wild Animal" project! Get out brightly colored crayons, paint, chalk, construction paper, scissors, and glue. Other brightly colored materials would also be helpful. With these materials, ask the students to draw, paint, or construct a colorful creature—one that could be a real, wild animal. They can make birds, reptiles, amphibians, in-

sects, fish, mammals—whatever real, wild animal they would like. Have the students describe how the coloring on the animal they created would help it to survive.

3. Make a "Colorful Wildlife Gallery." Display the animal creations in the classroom.

4. Develop a vocabulary list based on the children's descriptions of the animals.

5. OPTIONAL: Bring in wildlife reference books. Let the students look to see if they can find real animals like those they created.

6. Ask the students what they have learned about wild animals. Encourage the generalization that wild animals occur in a wide variety of colors and that animals' colors and markings help them survive.

EXTENSIONS

1. Make a "Museum of Color." Match the students' invented animals with pictures of real animals. Find the primary colors of red, yellow and blue. Look for "rainbow" animals that have three or more distinct colors on their bodies.

2. Make a "Colors from Nature" exhibit, and include colors from plants, rocks and soil—as well as wildlife.

3. Put the pictures of animals with pictures of their natural surroundings. Look for animals that blend and those that stand out brightly.

AQUATIC EXTENSIONS

1. Make a colorful, wild, aquatic animal!

2. A coral reef is one of the most colorful places in the world. Find pictures of reef fish or other reef animals. A look at tropical fish tanks in a pet store or aquarium would also show the diversity of colors found in coral reef animals. Pick a picture of a colorful animal that lives in a coral reef. Think of at least one way this bright color might help the animal survive in its environment. Using bright -colored crayons or other art materials, create a colorful reef animal and draw a picture of it in its habitat.

3. Research light extinction in water. Find out, for example, why bright red fish are camouflaged. Then design a fish based on the depth of its aquatic habitat. View the fish through appropriately colored cellophane or plastic to simulate the effect of its camouflage.

EVALUATION

1. Name a wild animal that has red for a color. Name two wild animals that have brown for a color. Name one that has yellow, one that has blue, and two that have green for a color.

2. Create a model or picture of a colorful butterfly or moth and place it in the classroom. Explain how the colors you gave it will help it survive. Explain where in the classroom its chances for survival would probably be best.