

Grades: K-3

TEKS:

K: 1A & C-G, 2B, 3A-C, 5A & F-G, 11, 12B, 13A

1: 1A & C-G, 2B, 3A-C, 5A & F-G, 11A, 12A, 13B

2: 1A & C-G, 2B, 3A-C, 5A & F-G, 11B, 13B-C

3: 1A & C-E & G, 2B, 3A-C, 5A & F-G, 11B-C, 13A

Topics:

Adaptations
Basic Needs
Habitats and Ecosystems
Predator/Prey
Properties/Characteristics

Methodologies:

Craft

Setting: Classroom

Activity Time: 30-45 minutes

Additional Subjects: Art

Objective:

Students will explore physical characteristics, such as camouflage as an adaptation used by animals for protection.

Materials:

Provided Not Provided

PowerPoint Color ads from magazines OR
Cutout Page Patterned wrapping paper

Colored pencils or crayons

Glue

Materials Provided in Discovery Trunk:

Animal Adaptations trunk items

Vocabulary:

adaptation, basic needs, camouflage, conservation, environment, predator, prey, stewardship, survive



Camouflage Creatures

Background:

Adaptations are characteristics that help living things adjust or change in order to survive in their environment. Camouflage is one type of adaptation that makes it difficult to see an animal in its natural habitat or the specific environment where it lives. This can be done by blending in with its surroundings, making it difficult to be seen, or through the use of protective coloration. Lady beetles stand out by using their bright color to warn predators to stay away from them. Predators know to leave them alone because they do not taste good. Camouflage is an important factor in animal survival, allowing the animal to survive by hiding from its predators. Camouflage can also be beneficial to predators, allowing the predator cover while hunting its prey. An animal that is best camouflaged in its environment has the best chance to survive, reproduce, and pass its color pattern on to its offspring.

Activity Preparation:

• Print enough copies of the cutout pages so that each student can have one. To save time, it may be helpful to prepare a cutout ahead of time for each student.

Procedure:

Discussion

- Begin the lesson by asking students what they need to survive, or stay alive. Introduce or review "basic needs" as something that all living things must have to survive, including animals. Next, ask students if they can name the four basic needs that living things must have (food, water, shelter, and space).
- 2. Explain that wild animals do not have caretakers or people who provide them with their basic needs as pets do. Stress the importance of conserving or protecting animals that live in the wild by taking care of their environment, which is made up of their surroundings or the place where they live. Conserving and protecting the environment of animals in the wild is known as stewardship.
- 3. Arrange students in groups of 3-4. Initiate a conversation about animals and their need to protect themselves from predators. Ask students if they know what the term "adaptation" means. Introduce or review the term as a characteristic that helps a living thing adjust or change to survive within its environment as a way to escape predators or animals that want to kill and eat them.
- 4. Some animals have bright coloration as a warning to potential predators, while other animals have special coloration called camouflage to blend in with their environment. Use the pelts of the skunk, raccoon, and deer, which are included in the *Animal Adaptations* trunk to assist with the conversation (or show pictures of these animals if you do not have a Discovery Trunk). A turtle shell and turkey feathers are also included.
 - Deer and raccoon pelts, turkey feathers, and turtle shells special coloration to blend in with their environment to help them hide from or avoid potential predators
 - Skunk bright coloration (black and white stripe) as a warning to potential predators
- 5. Ask students if they know why the skunk uses bright coloration and the other examples do not.

6. Use the provided PowerPoint to further student understanding of camouflage.

Activity

- 1. Provide each group with a large colored ad from a magazine or patterned wrapping paper. A busy and colorful ad or paper will create the best scenario. This piece of paper will represent the "environment," or the surroundings, of an animal. Tell students they are going to do an activity that will illustrate how some animals are camouflaged, allowing them to blend in with their environment. Reinforce that camouflage is a means of protection for many animals.
- 2. Provide each student with a cutout of a duck. Ask the following questions:
 - Pretend this duck was alive. What would its basic needs be?
 - What would this duck want you, as a steward, to do to protect its environment?
- 3. Instruct students to color their duck so that it is camouflaged in the "environment".
- 4. Instruct students to tape or glue their ducks onto their environment.
- 5. Instruct student groups to show their environments to other groups to see if some patterns are more difficult to locate than others.

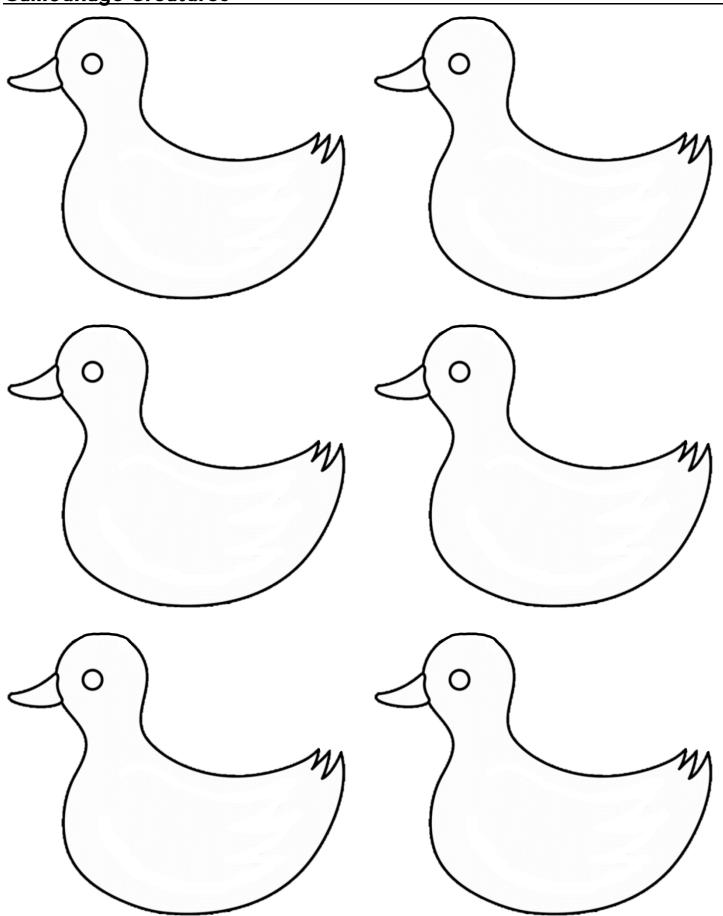
Wrap-up

- 1. Ask students to take turns explaining to the class what camouflage means.
- 2. Ask students what is a good stewardship action they can take to help camouflaged animals?
 - Pretend you are on a nature walk and come upon a hollow log or a pile of leaves. Which
 choice is a better stewardship action and why? Moving the log and leaves so the trail
 looks tidy or leaving them where they are.
 - How can grass, trees, and bushes help animals use camouflage?
 - How can cutting down tall prairie grass be a bad example of stewardship?

Extension:

Older students can use the internet to explore other types of camouflage. Ask students to write about their findings.

Camouflage Creatures



Camouflage Creatures



This is an Eastern Screech-owl. It is difficult to tell it is there because it looks much like the tree.



This frog is well camouflaged.

Those that want to eat him will have a hard time because he is the same color as the soil.



Judy Gallagher



This Arctic Hare changes colors with the seasons.

 Would the hare have a problem if he kept his dark fur in winter?

 A fox would probably like for the rabbit to stay white in the summer. Why?

Lady beetles have protective coloration. Their bright color is a warning to predators, letting them know they are poisonous!

