



MINNESOTA ZOO™
Changing how you see the world

MN Graduation Standards supported:

Grade 3 Strand 1.B

The student will understand the nature of scientific investigations.

Grade 3 Strand IV.B

The student will recognize that plants and animals have different structures that serve various functions.

Grade 3 Strand IV.C

The student will understand that an organism's patterns of behavior are related to the nature of its environment.

Grade 5 Strand IV.E

The student will know that biological populations change over time.

Vocabulary:

Adaptation: A characteristic of a living thing that makes it better suited to survive in a particular environment.

Physical Adaptation: A physical characteristic that helps the animal better suited to survive in a particular environment. An example would be the blubber in a whale, keeping it warm and storing energy.

Adaptations of Imaginary Animals Grades 3 -6 Pre-visit Activity

Introduction:

There are many different animal adaptations found in nature. Through this activity, students compare the different adaptations of animals and how these specific adaptations help the animals survive in the wild. They also evaluate how these adaptations relate to the habitat, diet, and behavior of the animal.

Objectives:

At the end of this lesson, the students will:

1. Analyze how physical and behavioral adaptations help organisms survive.
2. Define physical and behavioral adaptations as well as camouflage.
3. Relate the adaptations of the animals to its habitat.

Procedure:

1. Explain that a giraffe's long neck is an adaptation; a trait that helps it fit in and survive in its environment.
2. Tell students that sometimes different species within the same family have very different adaptations that depend on location. For example, the Amur tiger has striped fur while the snow leopard sports a white and black coat. These adaptations allow each species of cat to meet the challenges of its different environment. The Amur tiger's striped fur keeps it disguised in the dense forest of the Russian Far East; the snow leopard's white fur helps it hide in its snowy environment.
3. On the chalkboard or chart paper make three columns. Label the first column "Animal," the second column "Adaptation," and the third column "Effect." Fill in the first two columns with some sample animals and their adaptations. Then, ask students the effect of each animal's adaptation. Encourage students to add their own ideas to the list.

Vocabulary continued

Behavioral Adaptation:

The way an animal behaves that makes it better suited to survive in a particular environment. For example, some instincts are behavioral adaptations.

Links:

Adaptation Games

<http://www.harcourtschool.com/activity/animalneeds/>

http://www.ecokids.ca/pub/eco_info/topics/climate/adaptations/index.cfm

Animal Adaptations

Quiz

http://www.netrover.com/~3384mary/quiz_science/animals/quiz1.html

Animal Adaptations

Flashcards

http://whyfiles.larc.nasa.gov/text/educators/activities/2001_2002/athome/animal_adapt.html

Scholastic Adaptations

Investigation

<http://teacher.scholastic.com/dirtrep/animal/index.htm>

Minnesota Zoo

www.mnzoo.org

Procedure Continued:

4. Using what they have learned about adaptations, have students work individually or in small groups to design an imaginary animal. They can use modeling clay, paper and crayons or markers, or other art supplies.
5. Have each group give a name to their animal and develop a fact sheet. The fact sheet should include habitat, diet, gender, behavior and physical characteristics.
6. Once the students are finished, display the animals and have the students examine the animals and make predictions about habitat, behavior and diet based on the animal's visible characteristics. Then have the students share their fact sheets with the class.