

Amazing Animal Adaptations (Grades K-8) Teacher Guide

Objectives

- To explain the requirements of a habitat (food, water, shelter, and space).
- To explain the term adaptation and give examples of how animals and plants are adapted to their environment.

Pre-Lesson Activities

Introduce Habitats of the Greater Yellowstone region

Discuss with students the different types of habitats in the Greater Yellowstone Ecosystem.

Alpine – tall mountain above 10,000 feet with cold, windy, and snowy conditions with little trees or shelter

Mountain Forest – a forest between 6,000-10,000 feet in elevation with more trees and shelter than the Alpine habitat

Mountain Meadow – a wet habitat with elevations above 6,000 feet

Plains Basin – a dry habitat with elevations below 5,000 feet

Introduce Vocabulary

Discuss the vocabulary terms below.

Habitat – a place where plants and animals live with four important requirements for survival (food, water, shelter, and space)

Adaptation – a characteristic, trait, or “thing” that plants and animals have that helps them survive in a particular environment

Carnivore – animals that eat other animals

Herbivore – animals that eat plants

Camouflage – an animal’s ability to blend in with its surroundings

Predator – an animal that hunts other animals for food

Environment - the surroundings in which a person, animal, or plant lives

Shelter – an animal’s place of safety and protection from danger and weather

Riparian – a wet environment near rivers and streams

Post-Lesson Activities

Studying Endangered Animals

Study different types of endangered animals in the Northern Rocky Mountains. Discuss their status today. Examples may include the grizzly bear, gray wolf, black-footed ferret, prairie dog, Canada lynx, whooping crane, and Wyoming toad.

Mixing up Adaptations

Materials: The Mixed-Up Chameleon by Eric Carle, craft supplies

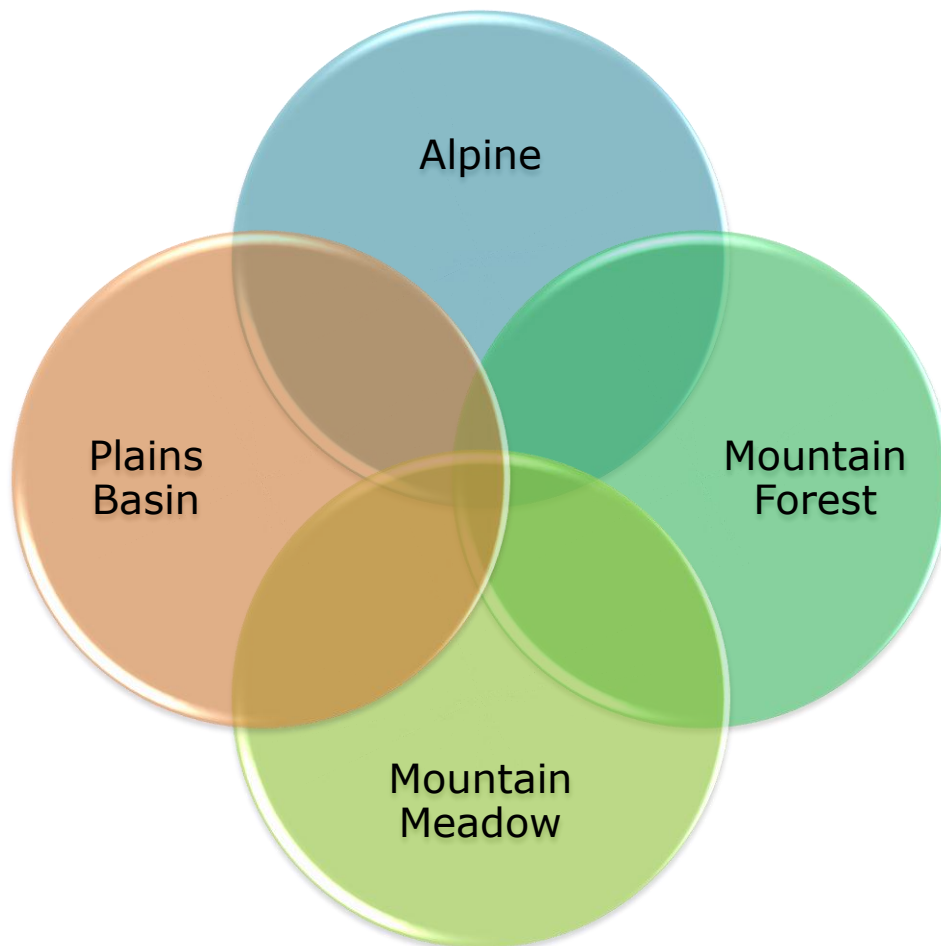
Read or have students read *The Mixed-Up Chameleon* by Eric Carle. Challenge students to name the different adaptations the chameleon has throughout the story. Allow time for students to create their own mixed up animal with many adaptations.

Comparing Adaptations

Materials: Venn Diagram

Have students complete a Venn Diagram such as the one provided. Ask student to recall the different animal adaptations from each habitat. Explain that they should fill in the diagram looking for similarities and differences in adaptations.

Venn Diagram showing habitats in the Greater Yellowstone Area



Resources

Buffalo Bill Center of the West Resources

www.centerofthewest.org

Buffalo and How They Live – available on VHS through our lending program

This video captures buffalo life in Yellowstone National Park including a newborn calf struggling against a spring snowstorm, bulls as they spar, and buffalo defending their young. Learn about amazing supporting players such as elk, and the always-present coyote.

Catch Me if You Can – available on VHS/DVD through our lending program

Discover the role of play in all animals' lives. Watch elk calves dodging in a game of tag, and bison calves butting heads. These activities prepare animals for life as an adult. This documentary shows excellent comparisons of adult animals and their young.

Gray Wolf Natural History Trunk – available through our lending programming

The Gray Wolf is a keystone species of the Greater Yellowstone region. With its reintroduction in 1995-1996, there has been a lot of discussion about the impact of this animal. Use this trunk to explore the wolf's biology and controversy, and to develop management solutions in your classroom! The trunk contains a wolf pelt, skulls, tracks, and various other current resources and fun activities! A teacher's manual and activities for grades 1-8 are also enclosed.

Other Resources

Our Wild World series (Northwood Press)

- *Moose*
- *Bison*
- *Wolves*
- *Black Bears*
- *Cougars*
- *Eagles*

Animals That Hibernate (Watts Library: Animals) by Phyllis J. Perry

Animals That Migrate (Watts Library: Animals) by Carmen Bredeson