



SELF-GUIDED BACKPACK TOUR

ADAPTATIONS 3rd Grade through 5th Grade Pre/Post - Zoo Activity



Objective: Identify animal characteristics. Determine how these characteristics help animals survive and how scientist use characteristics to group species of animals.

TEKS: Grade 3 – Students can

- 3.9a – observe and identify characteristics among species that allow each to survive and reproduce
- 3.9b – analyze how adaptive characteristics help individuals within a species to survive and reproduce

Grade 4 – Students can

- 4.8a – identify characteristics that allow members within a species to survive and reproduce
- 4.8b – compare adaptive characteristics of various species
- 4.8c – identify the kinds of species that lived in the past and compare them to existing species

Grade 5 – Students can

- 5.9a – compare the adaptive characteristics of species that improve their ability to survive and reproduce in an ecosystem
- 5.9b – analyze and describe adaptive characteristics that result in an organism’s unique niche in an ecosystem
- 5.9c – predict some adaptive characteristics required for survival and reproduction by an organism in an ecosystem

Essential Question:

What characteristics do animals have that help them adapt to their environment?

Vocabulary:

Characteristic	Adaptation	Camouflage	Prehensile
Counter shading	Poison	Venom	

Materials:

- One Zoo picture and description for each pair or group of students
- Various colors of Play Doh or clay and habitat descriptions



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ADAPTATIONS

3rd Grade through 5th Grade

Pre/Post - Zoo Activity



Pre-Zoo Activity:

Begin with asking, “What are adaptations?” Write key vocabulary words or examples that students provide on the board. Create a class definition of the word adaptation. Compare to dictionary definitions and decide on a “common language” definition for the class.

Using this information, display a picture of a chosen animal. Have students list characteristics of this animal. Discuss how each characteristic is used by the animal to survive. Ask how this animal adapts to its environment by using these characteristics. Demonstrate this on a couple of animal pictures such as a bird, a mammal and/or a reptile.

Divide the class into groups of three to four or into pairs. Provide each group/pair with an animal description and picture sheet. Each group/pair will list three to six characteristics of this animal. They will write the adaptations of each animal to explain how this helps this particular animal survive. Some adaptations are not explained. Encourage students to research and find out how the adaptation is used by the animal. Each group may then share their pictures, descriptions and findings with the class verbally or on a display.

In-Zoo Activity:

Adaptations – Creature Features BINGO – Available at the Fort Worth Zoo Education Center by registering your group at www.fortworthzoo.org.



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ADAPTATIONS 3rd Grade through 5th Grade Pre/Post - Zoo Activity



Post-Zoo Activity:

Each group/pair will be given a habitat description. The students must then use these habitat descriptions to create a creature with three to six characteristics (depending upon the age) adapted to this environment. Students will create a creature out of clay or Play Doh and invent a name for their new species. Students write a small paragraph to explain each adaptation and how this adaptation helps this animal survive in its habitat. Students are encouraged to use the vocabulary words in their paragraphs.

Habitat Descriptions:

Habitat One:

The temperature here ranges from 70 to 100 degrees Fahrenheit throughout the year. It rains six months out of the year so the land is covered in thick forests. There are many different types of animals and plants. The ground is covered in plants and moss. Wherever you go there is plenty of shade because of the broad leaved trees.

Habitat Two:

This place is extremely hot during the day and very, very cold at night. Temperatures range from freezing at night, 32 degrees Fahrenheit, to over 100 degrees Fahrenheit in the day. There are very few plants but the plants that do grow here have thorns. The ground is covered in sand and rocks. The sun is usually shining and bright during the day. There is less than three inches of rainfall here each year.

Habitat Three:

This underwater habitat has lots of moving salty water and tall water plants. There are many bright colorful creatures that live here. The temperature stays around 65-80 degrees Fahrenheit year round. The ground is sandy and covered with living creatures that look like rocks or leafless plants.

Habitat Four:

This habitat is covered in snow and has a long winter. Rocky cliffs cover the land and the water is frozen most of the time. During the short summer there are no nights. There are very few trees and the plant life is mostly moss and lichen. Some animals will migrate here.

Habitat Five:

There are almost no trees in this landscape. It is covered in tall grasses and rich soil. There is a rainy season and a dry season where fire comes through and burns the grasses. In the winter this habitat can be as cold 40 degrees Fahrenheit and in the summer it may reach temperatures of 100 degrees Fahrenheit.