



6th Grade EdZoocational Adventure Guide

Theme: Animal Adaptations - Behaviors

Grade level: 6th

DESE Standard: 6-LS1-4 Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

Overview: How an animal responds to stressors greatly affects their ability to survive. Stressors can include predators, weather, hunger, competition for breeding, illness, etc. Black bears of both sexes rub their scent on marking trees to secure their territory. They rub their shoulders, neck, and crown but may also claw and bite a tree. Neighboring black bears can smell the owner of the property and know not to enter. Migratory species travel to warmer climates to escape the winter cold, while other species sleep through it during hibernation. Males of numerous species often fight for the right to breed with females which ensures that the largest and/or fittest males reproduce.

Activity: Use the activity page to document the behaviors of chimpanzees, elephants, and siamangs. Allow students to describe how the animal is behaving. Students should write why the behavior is performed and what are the benefits of the behavior.

Activity Extension: This activity can also be applied to human behavior. Discussions could include how humans respond to fear, joy, anxiety, etc. How do these behaviors help humans to survive situations like natural disasters or even everyday human interactions? How might these behaviors change within different communities: friend groups, family, coworkers, etc?

6th Grade Tour Guide


This self-guided tour takes your class along a path to exhibits with animals that have distinctive adaptive behaviors. This path does not cover the entirety of the zoo, but is meant to accentuate the lesson narrative.

- As you enter, head to the left past the dome then follow the path past lorikeets and lemurs.
- Remind students that calm, quiet guests see more animals. Loud noises send them into hiding making them harder to find.
- **Chimpanzees:** Chimpanzee troops are formed around a hierarchy which is a system where there are individuals that are ranked due to status or authority. Chance, one of our alpha males will often display his dominance among the family members. These displays consist of hooting, feet pounding, and gesticulating (which is gesturing).
- **Elephants:** Zina and Sophie often participate in what we call an elephant sway. Asian elephants can weigh up to 12,000 lbs, putting a lot of pressure on their feet. The swaying motion helps shift their weight and become more comfortable while standing, especially if the elephant is geriatric.
- **Ringtails:** Also known as a miner's cat, our ringtails are located next to the large Aldabra tortoises. They aren't related to cats at all, but are cousins to raccoons. They have the ability to climb down trees headfirst by rotating their ankles 180° and release a musky scent when threatened; making them a tough meal to catch.
- **Grizzly Bears:** When the weather starts getting cold, Nona and Anne know it's time to hibernate. Hibernation is a process of staying dormant during winter. The reason for hibernation is to help avoid some of the winter elements and to conserve as much energy as possible since food is scarce. During this dormant period, bears do not eat, drink, or even defecate. Mother bears will often give birth in their sleep too!
- **Ostriches:** During the mating season, male ostriches perform a mating dance. This dance involves the male fluffing up his feathers and swaying his neck. Male ostriches will often continue their dances while getting down on their knees. His dance is to try and attract as many female ostriches as possible, while females will often play hard to get but that doesn't stop him. He will continue his ritual until a female agrees to be paired with him.
- **Nake Mole Rats:** Naked mole rats are a matriarchal species. This means that the family group is run by a female, known as a queen. She harasses all the other females until they are so stressed that they cannot get pregnant. This ensures that the queen is the only female in the colony to produce offspring.
- **Servals:** Akita and Louise use urine and feces for communication among other servals and claim territory. They will often spray urine on trees and bushes, along with scraping urine and feces into the ground. Male servals tend to scent their territory more often than females.
- **Alpacas:** Alpacas use spitting as a form of communication. Alpacas use this as a warning; keeping competitors away from their food. They will also spit as a defense mechanism; giving them time to escape. Females will also use spitting to let males know they're not interested. Alpacas tend to use spitting towards other alpacas more often than towards humans.
- **Hornbills:** Chaos and Anarchy exhibit a lot of pride in the items they find or catch. They parade many of these items in their mouth, from prey to enrichment. There are many theories as to why they do this; from breeding rituals to simple attention seeking behavior.
- **Siamangs:** Crash and Sutura use their large inflatable throat sacs to create many types of vocalizations. The throat patches are gray to pink and can inflate to the size of a grapefruit. These calls can often be heard up to 2 miles away and are used to claim territory as large as a 30 mile radius. Male and female paired Siamangs will also duet with each other creating their very own unique song.

Animal Adaptations—What are behaviors?

Animal	Behavior exhibited	Why is the behavior performed?	What are the benefits?	INSTRUCTIONS
Virginia Opossum	Playing dead	The animal is using a defense mechanism to become immobile and appear dead.	Appear unappetizing and dead or sickly to potential predators making the predator leave them alone.	<p>Use this field journal to explore the behaviors of the animal kingdom while on your visit to the Little Rock Zoo!</p> <p>On your tour, think about what behaviors these animals do and why they do them</p> <ol style="list-style-type: none"> 1. For each animal listed, watch that animal for interesting behaviors. 2. Once you observe a behavior you'd like to mention, write what that behavior is. 3. Write why is the behavior performed? 4. Write what the benefits of that behavior is on that animal (why do they do it?). <p>CONNECTIONS: Watch animals around your house—what behaviors do these animals do? Why do you think they do that?</p> 
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Elephants				
Siamangs				

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