Lesson 2 – Chimpanzee Habitats

In this lesson, students will learn about habitats, ecosystems, and the basics of structural and behavioral adaptation.

Crosscutting Concepts – cause & effect, patterns, stability & change

NGSS Reference – MS-LS2-1 Ecosystems: Interactions, Energy, and Dynamics Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.

Vocabulary

- Adapt to change or adjust to a new situation
- Adaptation a change in an organism that occurs to help it survive and reproduce
- **Behavioral adaptation** a change in the way an organism acts
- **Ecosystem** collection of organisms living and interacting with each other in a specific geographic location
- **Endangered** facing a high risk of extinction
- **Extinct** no longer in existence
- **Forage (n)** –a mixture of shelf-stable food staples that the chimpanzees enjoy and that encourages them to search and gather
- Forage (v) to search for and gather items (can be indoors or outdoors)
- **Habitat** an organism's natural environment
- Organism a living creature that is a plant, animal or single-celled life form
- **Structural adaptation** physical features of an organism that helps it survive in its environment











Time	Teacher	Student
Engage 15 mins	Engage students by explaining that they're going to watch a video about Chimp Haven habitats. Before students watch have them consider the three questions below and fill out the K-W-L chart. • "What makes a livable habitat for you or for other animals?" • "What would you do if you had to adjust to a new habitat?" • "Have you ever moved habitats (to a new house)? If so, what are some things you did to adapt?" Chimp Haven Forested Habitats Video	K-W-L Chart Before watching the video have students think about the topic questions and fill out the "know" and "want to know" sections.
Explore	Observations from the video. • Have students complete the K-W-L chart	Initial Reaction Have students share their reactions
30 mins	 Share that all organisms have a habitat. Within each habitat there are many organisms that affect each other called an ecosystem. All organisms need to adapt to their habitat in order to survive. Discuss chimpanzees in the wild and their natural habitats. Have students read through the education pages to learn more. Chimp Haven Education Web Page While Chimp Haven's habitats differ from those in the wild the sanctuary site was chosen with chimpanzee needs in mind. The climate, natural vegetation, and usefulness of the space to the species were all determining factors in whether or not the location would serve as the best space for the retirees. Since the chimpanzees at Chimp Haven have lived in captivity all their lives, they do not have the experiences and skills they would need to succeed in the wild. At Chimp Haven, our goal is to provide them with many of those experiences in an environment that is safe and designed especially for them – including large, dynamic social groups, various types of enclosures and habitats to roam and explore, and daily enrichment to mimic the skills and behaviors of their wild counterparts. Since many of our chimpanzees also have chronic illnesses, it's important that they have access to the expert veterinary team at Chimp Haven to keep them healthy and thriving. At Chimp Haven, they get to experience life lived on their terms while still having the support they need in their daily care. 	to the story. What are some of the adaptations the group made upon being in the habitat? What were some things that they had to adjust to? K-W-L Chart After watching the video have students fill out the "learned" section of the chart.











	 Chimp Haven residents have access to natural vegetation, places to rest, play, and explore. A key difference between sanctuary life and the wild is that care staff provide food, water, and veterinary care for groups while in the wild groups are self-sustaining. Have students read the blog post about Hobbes's group in the habitat for the first time. Hobbes and Friends in the Habitat Blog 	
Explain 20 mins	Describe adaptations that can occur in various ecosystems and relate the changes to the ability of an organism to survive. For example, a toad can camouflage itself in order to blend in with its surroundings. Ask students why they think that would benefit the toad. Explain structural and behavioral adaption as they relate to both humans and animals. Visit the key terms before moving to the worksheet.	Adaptations Activity Have students fill out the adaptation worksheet in small groups or individually then discuss.
Elaborate 1 hour	Explain that chimpanzees are an endangered species. Read through the web page or have students read through on their own. Have students consider "Why are chimpanzees endangered?" Conservation Web Page Use the endangered guide or have students identify an animal that has been declared endangered. Note that while extinction is a natural occurrence the current rate at which species are experiencing decline is rapid. Have students consider the following factors. • Why do you think the animal is endangered? • What do you think some of the effects of their decline or possible extinction is having or could have on the ecosystem? After the exercise have students design a sanctuary habitat using their learnings.	Endangered Species Worksheet Assign an endangered animal to students from the list provided, or have students identify their own. Have students conduct research on their animal and fill out the worksheet. Habitat Activity Have students work in their small groups or individually to design a sanctuary habitat.
Evaluate 25 mins	Hold a classroom discussion with the aid of the provided questions. Visit Chimp Haven's webpage to review more including ways to help the species. Conservation Web Page	Discuss Have students discuss the questions as a class or one on one with you.









