

Lesson 3 – Chimpanzee Behavior



In this lesson, students will learn the basics of animal behavior, observational methodology, and the importance of data collection at Chimp Haven.

Crosscutting Concepts – patterns, cause & effect

NGSS Reference – MS-LS4-2 Biological Evolution: Unity and Diversity

Clarification Statement: Emphasis is on explanations of the evolutionary relationships among organisms in terms of similarity or differences of the gross appearance of anatomical structures.

Vocabulary:

- **Activity Budget** – a collection of data that shows how much time the chimpanzees spend doing certain behaviors or activities
- **Behavior** – the way an animal acts
- **Culture** – Socially-transmitted and learned behaviors in a group of animals (not an entire species) Or Behaviors that are carried on by learning and imitation, not genes
- **Diurnal** – during the day
- **Enrichment** – an item, activity, or behavior that enhances the quality of life of an animal
- **Ethogram** – a table of recorded actions or behaviors
- **Fission-fusion** – fission means to split and fusion means to come together, fission-fusion means to split then come back together over time
- **Instinctive behavior** – inherited behavior that a species doesn't have to learn to do
- **Learned behavior** – a behavior learned by experience
- **Observation** – actively watching something with the purpose of understanding it better
- **Species-typical behavior** – acts that are shared by a species



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Time	Teacher	Student
<p>Engage</p> <p>25 mins</p>	<p>Discuss the key term behavior with students. Engage students by explaining that they'll watch a video compilation of chimpanzees exhibiting different behaviors at Chimp Haven. Before they watch explain the difference between instinctive (nature) and learned (nurture) behaviors. Ask them to consider the following while watching the video:</p> <ul style="list-style-type: none"> • "What are some of your instinctive behaviors?" • "What are some of your learned behaviors?" • "What do you think some "species typical" behaviors are for chimpanzees and for humans?" <p>It's important to note that a lot of behaviors that people think are instinctive to chimpanzees are actually learned (climbing trees, learning to be mothers, etc.)</p> <p>Chimpanzee Behavior Video</p>	<p>Nature vs. Nurture Activity</p> <p>After watching the video have students fill out the worksheet.</p>
<p>Explore</p> <p>20 mins</p>	<p>Observations from the video.</p> <ul style="list-style-type: none"> • Ask students to share their answers and why they chose them. Then share the correct answers for the worksheet. • Behaviorists at Chimp Haven study different facets of chimp life at the sanctuary from social hierarchy to how the chimps are utilizing their spaces. • Explore the remaining key terms and have students collect data through observational methodology by following the worksheet and watching the video. <p>Habitat Exploration Video</p>	<p>Observational Methodology Activity</p> <p>Have students watch the video and follow the worksheet to record observations.</p>
<p>Explain</p> <p>30 mins</p>	<p>Observations from the video.</p> <ul style="list-style-type: none"> • Ask students to share some of the behaviors from the video as a class. Was there anything that they saw often that was not listed on the ethogram? • Watch the video again with narration to aid in the discussion. <p>Habitat Exploration Video (with audio)</p> <ul style="list-style-type: none"> • Chimpanzee culture is studied in the wild to see how different behaviors are passed on among groups. It's important for wild chimpanzees to pass down their culture because certain behaviors increase the chance for survival - just like humans. Another important part of behavioral data is creating activity budgets based on observations. Activity budgets show how much time the chimpanzees spend doing certain behaviors or activities. The behavior team is tasked with finding enrichment strategies that keep the chimpanzee groups active. 	<p>Activity Budget (optional math extension)</p> <p>Using the collected observation data create an activity budget for Flora's group.</p>

<p>Elaborate</p> <p>30 mins</p>	<p>Ask students to reflect on their activity budgets using the questions below as a guide.</p> <ul style="list-style-type: none"> • “In the context of the video what types of behaviors were performed most often?” • “Think about what your activity budget would look like for a 24 hour period. How is it similar and how is it different from a chimpanzee?” • It is important when working with chimpanzees to understand their behaviors. Taking the time to understand them helps caregivers create special relationships with the chimps. It also helps them get to know the chimpanzees as individuals and better understand what their “normal” is and what may be out of character. This might help us to know when a chimpanzee isn’t feeling well or needs more to do. 	<p>Discussion Questions</p> <p>Have students work in small groups or individually to complete the discussion questions.</p>
<p>Evaluate</p> <p>20 mins</p>	<p>Discuss small group answers to the discussion questions.</p>	<p>Discuss</p> <p>Have students discuss the questions as a class or one on one with you.</p>



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