

# Lesson 4 – Enrichment



**In this lesson, students will learn about chimpanzee enrichment, behavior, and how the concepts apply to human needs.**

**Crosscutting Concepts** – patterns, cause & effect, scale, proportion & quantity

**NGSS Reference** – MS-LS1-4 From Molecules to Organisms: Structures and Processes

**Clarification Statement:** Examples of behaviors that affect the probability of animal reproduction could include nest building to protect young from cold, herding of animals to protect young from predators, and vocalization of animals and colorful plumage to attract mates for breeding. Examples of animal behaviors that affect the probability of plant reproduction could include transferring pollen or seeds, and creating conditions for seed germination and growth. Examples of plant structures could include bright flowers attracting butterflies that transfer pollen, flower nectar and odors that attract insects that transfer pollen, and hard shells on nuts that squirrels bury.

## Vocabulary

- **Behavioral Ecology** – the study of animal interactions within their communities and environment
- **Browse** – in the world of chimpanzees browse can be leaves, flowers, and sometimes the bark of plants
- **Enrichment** – process for enhancing the well-being of chimpanzees and encouraging species typical behaviors
- **Habituation** – finding something less stimulating after being exposed to it many times
- **Nesting** – chimpanzee species-specific behavior in which the chimps create sleeping and resting structures; used like a human bed. Nests can be made out of all different materials in captivity but are typically made out of vegetation (branches and leaves) in the wild



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Time	Teacher	Student
<p><b>Engage</b></p> <p>15 mins</p>	<p>Engage students by explaining that they'll watch a series of videos about enrichment at Chimp Haven, and that the chimpanzees get enrichment every day, 365 days a year. Before they watch have them consider the questions below:</p> <ul style="list-style-type: none"> <li>• "What is enrichment?"</li> <li>• "Why do chimpanzees need enrichment?"</li> <li>• "What types of enrichment do chimpanzees need to thrive?"</li> </ul> <p><a href="#">Introduction to Enrichment Video</a></p> <p><a href="#">Browse Video</a></p> <p><a href="#">Nesting Video</a></p>	<p><b>Brain Dump</b></p> <p>Have students write down learnings from the video, their reactions, and questions.</p>
<p><b>Explore</b></p> <p>30 mins</p>	<p>Observations from the video.</p> <ul style="list-style-type: none"> <li>• Take a few minutes to discuss the brain dump activity and learnings from the videos.</li> <li>• Explore the key terms with students.</li> <li>• Reinforce that there are many different enrichment categories including food, environmental, sensory, and social. While there are others included in the field students can focus on this list.</li> <li>• Share that Chimp Haven creates an enrichment calendar to serve as a daily guide. Staff meticulously documents which enrichment is given to the chimps and their responses to the items for input on future planning.</li> <li>• Planning is key to make sure the most effective enrichment is given to each group and that the team sticks to a budget.</li> <li>• Have students create an enrichment calendar for themselves by following the instructions on the worksheet.</li> </ul>	<p><b>Enrichment Calendar</b></p> <p>Have students complete the worksheet.</p>
<p><b>Explain</b></p> <p>20 mins</p>	<p>Have students gather in small groups to discuss their enrichment calendars. Before groups get together introduce the following questions.</p> <ul style="list-style-type: none"> <li>• "How do the calendars differ from person to person?"</li> <li>• "Why did you choose some of the items?"</li> <li>• "How did you create the calendar to avoid habituation?"</li> <li>• "Do the items on the calendar achieve the goals outlined in the worksheet?"</li> </ul>	<p><b>Discussion</b></p> <p>Have students form small groups and talk through their calendars. Come together as a big group to discuss afterwards. Students can also discuss their calendar with you as an alternative.</p>



## Elaborate

25 mins

Have students read the blog post about enrichment. Ask them to consider what they've learned about chimpanzee enrichment. Discuss the following concepts as a group.

- What chimpanzees need to thrive and what humans need to thrive
- The similarities and differences between the two
- How chimpanzees spend their days and how humans spend their days
- The similarities and differences between the two

Ask students to consider how much of their time is spent doing enriching activities.

[Surprising Enrichment Blog](#)

### Read & Discuss

Have students read the blog post then come together as a group to discuss the concepts.

## Evaluate

20 mins

Conclude the lesson by watching a series of videos with the students.

- Remind students that chimpanzees are intellectual and need variety to avoid habituation. Another positive aspect of enrichment is that it helps the chimpanzees and sanctuary staff build important bonds.

[Forage Video](#)

[Tool Use](#)

### Discussion

After watching the video have students discuss the questions as a class or one on one with you.



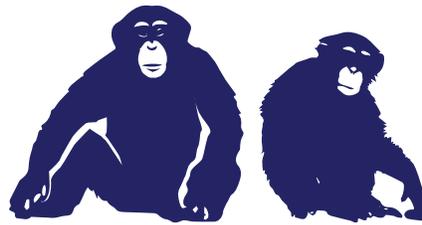
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## The Chimp Life

*-Brain Dump-*



Take 5 minutes to jot down what you learned from watching the videos about enrichment, nesting and browse. You may include your personal reflections, reactions, and questions!



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# Enrichment – Brain Dump



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# Enrichment – Enrichment Calendar



At Chimp Haven Enrichment Technicians create and follow a monthly calendar to serve as a guide for the chimps daily enrichment activities. To create the calendar the team looks at different characteristics such as the chimpanzees’ activity budget, the types of things that chimps do in the wild, and habituation. Enrichment is effective when it improves the overall welfare of the species and promotes species typical behaviors.

Consider the types of enrichment you receive in your daily life and create your own two-week enrichment calendar! Your calendar should include food, environmental, sensory, and social enrichments. It’s your calendar so the items you choose should fit your individual preferences just like they do at Chimp Haven! Some examples may include:

**Food-** Taco Tuesday

**Environmental-** rearranging your bedroom

**Sensory-** watching your favorite TV show

**Social-** visiting with a friend

Monday	Tuesday	Wednesday	Thursday	Friday
Fishers (chimp puzzles) <b>food</b>	TV/Radio <b>sensory</b>	Super forage (dried fruit) <b>food</b>	Staff Dress-up Day <b>social</b>	Wrapping paper <b>environmental</b>

Monday	Tuesday	Wednesday	Thursday	Friday



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# Enrichment – Discussion Questions



1. What is browse and why is it good for the chimpanzees?
2. How do you categorize chimpanzee forage enrichment?
3. How does the Behavior Technician in the video determine if what she included in the forage this time works and will be included in future forage mixtures?
4. Is there something that you like that could compare to chimpanzee forage? An activity, a type of food, something that challenges you the way that forage challenges the chimpanzees?



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# Enrichment – Discussion Questions

## (Answers)



1. What is browse and why is it good for the chimpanzees?
  - Browse is sticks and leaves from plants
  - Browse offers protein and fiber for the chimps
  - Chimps can use the browse for tools
  - It's a new stimuli and offers a change in their environment
  
2. How do you categorize chimpanzee forage enrichment?
  - Sensory
  - Food
  - Environmental
  
3. How does the Behavior Technician in the video determine if what she included in the forage this time works and will be included in future forage mixtures?
  - She observes how the chimps react to it
  - She notes what they like and don't like based on observation
  
4. Is there something that you like that could compare to chimpanzee forage? An activity, a type of food, something that challenges you the way that forage challenges the chimpanzees?
  - Examples may include trail mix, puzzles, picking wild berries, etc.
  - Encourage creativity!



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