

Jurassic Feast (GA Lesson #2)

Suggested Grade Levels: Grades 3-12

Standards:

MS-LS4-1 Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past.

MS-LS4-3 Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.
MS-LS4 Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships.

5-LS2 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

Scenario Overview / Introduction:

How did the dinosaurs wander around Jurassic World co-exist? Why were some put in fenced off areas? Why was it so important that there were plenty of different plant life throughout the park? The students will learn the connections between all these questions and be able to develop their own food chain.

Learning Goal: Students will learn the different types of eaters and how they connect with each other and the surrounding ecosystem.

Essential Question:

How do the different types of eaters affect the other types of eaters and how are they all connected?

Learning Objectives:

- 1. Students will identify and classify living and extinct animals into categories designated as plant-eating and meat-eating creatures.
- 2. Students will use information they find throughout the park to create their own food chain and use deductive reasoning to fill in the gaps.

Vocabulary

- Carnivore: An animal that feeds on animals
- Herbivore: An animal that feeds on plants



- **Omnivore:** An animal that eats both plants and animals
- Jurassic Period: Period of the Mesozoic Epoch, occurring from 190 to 140 million years ago, and categorized by an abundance of dinosaurs and the arrival of birds and mammals.
- **Primary Producer:** Any green plant or any of various microorganisms that can convert light energy or chemical energy into organic matter
- Primary Consumer: An animal that feeds on plants
- Secondary Consumer: A carnivore that feeds only upon herbivores
- **Decomposer:** An organism, usually a bacterium or fungus that breaks down the cells of dead plants and animals into simpler substances.

Pre-Visit Learning Activities:

- 1. Have the class read Gary Larson's book, "There's a Hair in my Dirt! A Worm's Story."
- 2. Facilitate a discussion on the above vocabulary
 - a. What does the word "Herbivore" have within the word itself?
 - i. Herb- what is an Herb?
 - b. What do you think an Herbivore would like to eat for dinner?
 - c. Any Spanish speakers know what word is inside "Carnivore"?
 - i. Carne- What does Carne mean?
 - d. What do you think a Carnivore eats for dinner?
- 3. Introduce the program experience by showing
 - a. <u>https://www.youtube.com/watch?v=8LIjT2iKAUY-</u> Herbivore
- 4. What are key characteristics that would need to be different between the three types of eaters?
- 5. Introduce or review the concept of a food chain and discuss how matter moves through the food chain.

While at Universal:

- 1. Students experience Jurassic World—The Ride where they experience different classifications of dinosaurs and plant life.
- 2. Students should visit Universal's Animal Actors show to see the different animals in that show for further material for their assessment.
- 3. Encourage students to record observations in a journal or take notes on what they see.

Post-Visit Learning Activities:

- 1. Review the dinosaurs and animals that the students saw while at the park.
- 2. Discuss the differences between small vs. large for carnivores
 - a. What are their hunting strategies?
 - b. How are each of their sizes an advantage?
- 3. Discuss the differences between small vs. large for herbivores



- a. What do they have to do to avoid predators in relation to their size?
- 4. Use the Dichotomous Key Activity page to categorize the different types of animals.

Assessment:

- Have the students construct a food chain with the animals they found in the park? Allow students to mix and match attractions such as Jurassic World—The Ride as well as Universal's Animal Actors
 - a. Tell students to be as creative as they would like? (I'm sure there are worms in the flower beds around the park)
 - b. What would you need to fill in the gaps in your chain?

FOR YOUNGER STUDENTS:

Have the students cut and paste different images of dinosaurs into a t-chart to sort carnivores and herbivores.



Dichotomous Key Activity

Put an X in the correct characteristic box marked yes or no.

12	Long Neck		Flat Teeth		Small Head		Jaw		Slow Movement	
3 3	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Allosaurus										
Apatosaurus		10		(č)		ic				
Brachiosaurus		<u>i</u>	í	a	r	3				
Camarasaurus		Q	(2		9 C		t C		s
Deinonychus		22	-	5.5		5 <u>5</u> 825				
Dilophosaurus		<u> </u>	t	<u>.</u>	š	šii		<i>ii</i>		<u>,</u>
Inguanodon		÷.				10	-			
Stegosaurus										<u>.</u>
Triceratops		9	ç	9		e		s		\$
Tyrannosaurus		5 ÷	-							
Dryptosaurus		<u>.</u>		S		Si		<u>, c</u>		<u>/</u>
Velociraptor		12 11				10	:	-		
Herbivore			(
Carnivore		Q	6	e		8		s		s
Omnivore	- 	÷	-							

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