NATURAL HISTORY MUSEUM LOS ANGELES COUNTY

The Dino Diner 4th Grade

Duration

Pre-Activity: 10 minutes

Activity: 30 minutes

Post-Activity: 10 minutes

Supplies

- Worksheet
- Pencil

Standards

NGSS

4-LS1-1, LS1.A, LS3.A, LS3.B

S+E Practices

2, 3, 4, 6

CCSS Math

4.NBT.A

<u>CA State</u> Mathematics

Grade 4 Number Sense 2.1

Vocabulary

Herbivore Carnivore Omnivore Ecosystem

Fossil

Diet

🔎 Student Work

Concepts

- Scientists infer what animals eat from the shapes of their teeth. •
- Bills are whole numbers with positive decimals added together to get • a sum or total.

Objectives

Outline

Students will identify the diet of four specimens on the attached Dinosaur Hall images based on the shape of their teeth and additional research.

1. Before the activity, introduce the concept that carnivores and

2. Students will use the attached images to see dinosaurs in the

Dinosaur Hall and complete their worksheet - in addition to any

other research they wish to do on these specific dinosaur species. 3. After the activity, review student work and answer questions.

concept of adding whole numbers to two decimal places.

herbivores can be identified using their teeth, and introduce the

Students will estimate and compute the sum of whole numbers and positive decimals to two places.

Pre-Activity

First, review (or introduce) the concept of whole numbers (including positive decimals). Go over how to sum up whole numbers with decimals. This will be a skill necessary to complete the worksheet.

If time, quickly review the concept that carnivores and herbivores can be identified using their teeth.

Teaching Note: Teeth are only one indicator of diet, there are other factors that are good clues that tell us what an animal might eat, as well as animals that have contradictory diets to their teeth structure. However, for the purposes of this lesson, this does not need to be a significant concept.

Activity

Distribute the Dino Diner worksheet and the Dinosaur Hall image packet and explain the assignment. They should begin with the "A Fossil Foodie" worksheet. Break students into pairs or small groups.

Teaching Note: Students may choose to use any four specimens they want to complete the assignment.

If you are short on time or would like to use it as a homework assignment, the back page of the worksheet (the math portion) can be completed after the field trip.

Post-Activity

Go over the worksheet together with a focus on the math section (Mealtime!). Ask students if they had any questions about how to complete the math, and take a couple examples from student worksheets to go through together.

Variations and Extensions

- Tell students there was a mistake on the bill, or that a customer didn't care for an item on their bill and wanted to return it and have them deduct that cost from the bill.
- Have students come up with their own menu items and costs that are whole numbers with positive decimals.



A Fossil Foodie

You are a world renowned chef the Natural History Museum has hired to create a menu for its new latenight café, *The Dino Diner*. Like any good chef, before creating a menu you want to identify the needs of your customers. Using the attached packet of dinos, choose four potential customers that might visit your café. Name them, observe and draw a quick sketch of their teeth, then circle what they prefer to eat.

	Usually, shar anin Flat grinding t	p serrated teet hal is a carnivo eeth suggest ar herbivore .	n suggest an re. n animal is an	Poss	
Customer 1:		Cu	stomer 2:		
Carnivore	Herbivore		Carnivore	Herbivore	
Customer 3:		Cu	stomer 4:		
Carnivore	Herbivore	\bigcirc	Carnivore	Herbivore	

Mealtime!

After your market research, you designed the menu below, but your new customers can't decide what delectable dish to order, and have asked you to pick their meal! Using the customers from the first page, design a delicious dinner for each animal and give them a bill.

\$	TOTAL		TOTAL \$				
				ded Palm ropod Sausage	age Pick Root Sau	Bird Saus: Roasted F	Seaweed Chopped Fruit
				sted Roach' ed Clams	epperoni Boil	e Kelp Rodent Po	Barbequed Reptilu Twisted Twigs
COST	ITEM	COST	ITEM	led Fish	igetable Gril	Grilled Ve	Toppings Marinated Leaves
gister.	/ Customer: Please pay at the re	ter.	Customer: Please pay at the regist	\$27.00	\$23.25	9.75	6 \$1
				\$23.25	\$19.75	4.50	3-5 \$1
v	TOTAL		TOTAL S	\$19.75	\$14.50	0.00	1-2 \$1
			•	Large	Medium	Small	Number of Toppings
				The second second			Pizza
					55.50 I slides for \$5.75	4 10	Egg Salad Insect Garlic Bread
COST	ITEM	COST	ITEM	\$5.50	imall: \$3.50 Large \$	s dr	Fern and Flower Sou
gister.	Customer: Please pay at the re	:er.	Customer: Please pay at the regist	no Diner	The Dir		Annotizora



TRICERATOPS



TYRANNOSAURUS REX



ALLOSAURUS



STEGOSAURUS

CAMPTOSAURUS



MOSASAUR

