

Dinosaur Feasts

Grades 4 – 5 Educational Program Guide

PASS

Grade 4 Science Process 1.2, 2.1, 4.4, 5.3 | Life Science 3.1, 3.2

Grade 5 Science Process 1.2, 2.1, 4.4, 5.3 | Life Science 2.1

OAS

4-LS1-1 | Science Practices 1, 2, 3, 4, 6, 7, 8 | Core Ideas LS1, LS4,

Crosscutting Concepts, Patterns, Structure and Function

Program Overview

How did dinosaurs eat? Students will compare dinosaur and modern animal skulls, jaws and teeth to answer this question. The specialized food processing characteristics of both carnivores and herbivores will be explored.

Objectives

After participating in this program, students will be able to:

- Compare dinosaurs to modern animals to figure out food processing lifestyles;
- Determine whether dinosaurs and modern animals ate plants, meat or both types of food;
- Discuss food processing characteristics of dinosaurs and modern animals.

Background

If scientists know what an animal eats, they can begin to understand how it fits into an ecosystem. Modern animals can be observed in their natural habitat and in zoos. On the other hand, extinct creatures leave only fossils to be studied. Fossils include bones, teeth or shells and trace fossils (tracks, skin impressions and coprolites, or dinosaur poop). All of these provide scientists with clues about an animal's lifestyle. We can better understand extinct animals by comparing their food processing characteristics (teeth, jaws, claws) represented by fossils to those of modern animals.

At the Museum

Hall of Ancient Life and Hall of Natural Wonders

Have students compare the dinosaurs they see in the Hall of Ancient Life to the modern animals in the Hall of Natural Wonders. Have them look specifically for characteristics that define an animal's food processing tools. Some things to consider:

- Deinonychus—Wolf and Hawk
- Tenontosaurus—Deer and Bison

Vocabulary

Browser	A specific type of plant eater. Browsers eat woody plants and twigs. During the dinosaur period, there was no grass so plant eating dinosaurs were more like modern browsers than grazers.
Carnivore	Meat eater; an animal that eats other animals.
Coprolite	Fossilized animal poop.
Digest	To convert food into simpler chemical compounds that can be absorbed and assimilated by the body.
Food Chain	The transfer of energy from one kind of living thing to another.
Gastrolith	Stones that some herbivores swallowed to help aid the breaking down of plant materials for food. Similar to materials in modern day chicken gizzards.
Grazer	Animals that eat grass.
Herbivore	A plant eater; an animal that eats only plant materials.