

DISCOVERING DINOSAURS

Teacher Resource Guide

Program Overview

PROGRAM DESCRIPTION: During this tour of our world-renowned *Dinosaur Hall*, young participants will learn about the different dinosaurs that lived in ancient Alberta. Each stop explores a curriculum concept like carnivores and herbivores, predators and prey, or plants and the ancient environment. After the tour there will be lots of time for questions with our dinosaur experts!

AUDIENCE: Grades K - 3 *(maximum 35 students)

Curriculum Connections

Kindergarten Science: Movements of Animals;
Examine and Describe Environments

Grade 1 Science: Understanding Movement; Environmental Change;
Needs of Animals and Plants, Scientific Investigation

Grade 2 Science: Earth and Landforms; Growth of Animals and Plants;
Investigation Methods

Grade 3 Science: Earth and Landscape Changes; Plant and Animal Interactions;
Investigation for Understanding

Program Objectives

Students will be able to:

1. Recognize a variety of dinosaurs and learn about the characteristics that make them unique.
2. Learn about the environments that dinosaurs inhabited.

3. Explore the different concepts related to dinosaurs, such as:
 - Carnivores and herbivores
 - Predators and prey; attack and defense
 - Eggs, babies, and parental care
 - Herds and packs
 - Ancient environments

Pre-Program

1. Have the students sit in rows and in view of the camera

Program Format

1. Introduction to palaeontology and fossilization
2. Enter the Mesozoic!
 - *Camarasaurus*: Characteristics of dinosaurs.
 - *Stegosaurus*: What did it eat? Herbivores, carnivores, and omnivores.
 - *Gorgosaurus* and *Euoplocephalus*: Attack and defense.
 - *Lambeosaurus*: Eggs and babies; herding.
 - *Dromaeosaurus*: Pack hunting and communication.
 - *Triceratops*: Ancient habitats and environments.
 - *Tyrannosaurus rex*: Dinosaur names.
3. Extinction: How did the large dinosaurs go extinct?
4. Questions and conclusion.

Key Terms

Following are some terms to introduce to your class. These terms will prepare the students so they will get the full benefit of the program.

Ancient: Existence of many years; referring to a remote period; to a time in early history (really old).

Carnivore: An animal that feeds exclusively on meat.

Dinosaur: Reptiles that lived 230 - 66 million years ago and lived mainly on land.
Ranged from the size of a chicken to the largest animal ever known to walk the Earth.

Environment: What is around an animal or plant; where it lives.

Extinct: Group of animals or plants that are no longer living; died out.

Fossil: The remains, traces, or imprints of a prehistoric organism preserved in rock.

Habitat: The part of the physical environment in which an animal or plant lives (its home).

Herbivore: An animal that feeds exclusively on plant material.

Mesozoic: Era of geological time between the Palaeozoic and Cenozoic eras; made up of three periods—Triassic, Jurassic, and Cretaceous. Also known as the Age of Reptiles or the Age of Dinosaurs.

Omnivore: An animal that feeds on both meat and plants.

Palaeontology: The study of ancient life on Earth based on the fossil record.

Featured Dinosaurs (in order of appearance)

Camarasaurus: (cam-air-ah-SORE-us) “chambered reptile”, from the hollow chambers in its vertebrae.

Stegosaurus: (STEG-oh-SORE-us) “roofed reptile”, from the plates on its back resembling roofing tiles

Gorgosaurus: (GORG-oh-SORE-us) “fierce lizard”, for the mouth full of sharp teeth.

Euoplocephalus: (YOU-oh-ploh-SEFF-ah-lus) “well-armed head”, from its tough armour.

Lambeosaurus: (LAM-bee-oh-SORE-us) “Lambe’s reptile”, referring to palaeontologist Lawrence Lambe.

Dromaeosaurus: (droh-MAY-oh-SORE-us) “running reptile”, from its speedy appearance.

Triceratops: (try-SAIR-ah-tops) “three horn face”, from the three horns on its face.

Tyrannosaurus rex: (ty-RAN-oh-SORE-us) “tyrant reptile king”, from its large size compared to other meat-eating dinosaurs.