

# VIRTUAL VISIT

## Teacher Resource Guide

### Program Overview

**PROGRAM DESCRIPTION:** Tour the world-renowned galleries of the Royal Tyrrell Museum of Palaeontology during this interactive virtual visit. Marvel at creatures from ancient seas, explore *Dinosaur Hall*, and discover how life carried on after the asteroid impact that marked the end of the Age of Dinosaurs.

**AUDIENCE:** Grades K - 12, General Public \*(maximum 35 participants)

### 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

**Grade 4 Science:** Organism Classification and Functions; Evidence and Data

**Grade 5 Science:** Climate and Weather; Evidence, Understanding, and Ethics

**Grade 6 Science:** Climate Change; Ecosystems; Scientific Explanations

**Grade 7 Science:** Interactions and Ecosystems, Planet Earth

**Grade 8 Science:** Freshwater and Saltwater Systems

**Grade 9 Science:** Biological Diversity

**Grade 10 Science 10:** Energy Flow in Global Systems

**Grade 11 Science 20:** The Changing Earth, Changes in Living Systems  
**Biology 20:** Ecosystems and Population Change

**Grade 12 Science 30:** Living Systems Respond to Their Environment  
**Biology 30:** Changes in Populations and Communities

## Program Objectives

**Students will be able to:**

1. Gain a stronger, broader understanding of the history of life on Earth.
2. Understand that time is divided into bigger and small amounts, to help scientists understand the different periods in Earth's history.
3. Learn more about different types of animals and plants that lived on our planet.

**Pre-program:**

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

## Program Format

1. Introduction to the Royal Tyrrell Museum.
2. What is palaeontology?
3. Introductory galleries.
4. Introduction to geologic time.
5. The Palaeozoic Era.
6. The Mesozoic Era.
7. The Cenozoic Era.
8. 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.

**Cenozoic Era:** “New life,” the time after the dinosaurs. Comprising the Palaeogene, Neogene (formerly the Tertiary Period), and the Quaternary Period.

**Fossil:** The remains or impression of a prehistoric organism preserved in petrified form or as a mold or cast in rock.

**Geologic Time:** The interval of time occupied by Earth’s geologic history. Can be split into eras, periods, and epochs.

**Geology:** The scientific study of origin, history, and structure of the Earth.

**Mesozoic Era:** “Middle life,” the time of the dinosaurs. Comprising the Triassic, Jurassic, and Cretaceous periods.

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

**Palaeozoic Era:** “Old life,” the time before dinosaurs. Comprising the Cambrian, Ordovician, Silurian, Devonian, Carboniferous, and Permian periods.

**Permineralization:** The type of fossilization in which minerals are deposited into the pore spaces of the originally hard parts of organisms.