

Concepts, Learning Goals, & Logistics

Overview

Become paleontologists for the day by comparing teeth from modern day and prehistoric animals. Using collected evidence, students will identify whose teeth are whose. Then they apply this knowledge to investigate what these dinosaurs may have had for lunch!

Dinosaur Dentists Session

Students work in pairs to handle replicas of teeth from prehistoric animals and sort them into groups using properties they observe about the teeth. They explain their reasoning and propose ideas for what the teeth tell scientists about the animals. Sorting continues with replicas of teeth from modern day animals where students make connections between tooth size and animal size, tooth shape and food. The pairs go back and apply these ideas to the prehistoric teeth as they match the tooth to the animal and develop their conclusions about the foods these animals ate. Students satisfy their desire to handle real teeth by examining teeth from *Edmontosaurus* and *Dromaeosaurus*.

Science Learning Goals:

- Students engage in the practice of science by making observations and comparison, collecting comparison, collecting data, and interpreting physical evidence.
- Fossils provide evidence of plants and animals that lived long ago.
- The shape and size of teeth provides information about the animal's food, and may relate to an animal's size.

Vocabulary Introduced: Scientist, Observations

Program Length: 50 minutes

Audience Size: Up to 30 students

Preparation: Science Museum instructor brings all needed equipment and materials. School provides two tables for assembly demonstration and access to electricity. Allow 60 minutes before and after program for set-up and take-down. School provides classroom space for the residency sessions. Materials can be moved from room to room, or taught in a designated space with tables and chairs for students and two tables for teaching materials and equipment.

MN Academic Standard Strand: The Nature of Science and Engineering (0.1.1.2.1, 1.1.1.1.1, 1.1.1.1.2)

NGSS Science and Engineering Practices: Analyzing and Interpreting Data (1-ESS1-1), Constructing Explanations and Designing Solutions (1-LS3-1)

NGSS Crosscutting Concepts: Structure and Function (2-LS2-2)