

Discovering Dinosaurs & Fossils Syllabus

Travel to the prehistoric world of dinosaurs! Explore a time of volcanoes, meteorites and ice ages as you hunt for clues and dig for fossils. Join in a journey back in time and learn to think like a paleontologist as we discover facts about dinosaurs and prehistoric life from their fossils. We learn about dinosaurs, fossils, volcanoes and earthquakes, plant life, the tundra biome and astronomy in a hands-on exploration experience. Each class has a mini-discussion followed by classroom demonstrations, hands-on activities, and labs.

Week 1: Geologic Time and Fossils

- We introduce the class and what we will learn during the session
- We learn when dinosaurs are believed to have lived – Triassic, Jurassic, Cretaceous eras and visualize how long ago each was
- We learn about the different types of fossils – mold and cast and make an imitation fossil rock

Week 2: Fossils

- We excavate the fossils made during Week 1 and identify what they are (students will excavate a different fossil from the one they made)

Week 3: Modeling Dinosaurs and Their Habitats

- We are introduced to the process that scientists use when attempting to reconstruct the past through reconstructing the skeletons of dinosaurs
- Since there is no map, we must use our problem solving skills to reconstruct the dinosaur from its bones
- We also learn how to make inferences about their habitats from what we find

Week 4: Dinosaur Size

- We use study the different sizes of dinosaurs and gain an appreciation for scale

Week 5: Dinosaur Footprints

- We learn that scientists use fossilized footprints to learn about dinosaurs
- We model trackways using our dinosaur models
- We discuss strides and the correlation to size

Week 6: How Dinosaurs Lived

- We learn about adaptations by making inferences about how dinosaurs lived from the type of teeth and claws they had.

Week 7: Dinosaur Classification

- We learn about animal classification and we develop a classification system for dinosaurs
- We revisit our animal footprints and use their trackways in assisting with the classification

Week 8: Dinosaur Names

- We learn the different names of dinosaurs and what they mean
- We create imaginary dinosaurs and apply the naming conventions to name them