



Moab Museum School Programs: Kindergarten Lesson Plan

Designed to complement the Museum's field trip programs, these core curriculum-aligned activities are intended for classroom use by teachers to help students learn about dinosaurs.

Moab is one of the best places in the whole world to find dinosaur fossils! What was Moab like millions of years ago when dinosaurs roamed the earth? The landscape of the whole world looked very different back then, and has changed a lot over the history of the planet. The area we live in today has at different times in the past been underwater beneath the ocean, dotted with swamps, covered with forests, and buried in massive sand dunes. All of these environments are preserved as different layers of rock, and the layers contain clues about the plants and animals that lived during these times. Fossil are the remains of life that get buried in sediment (like mud or sand) and eventually harden into rock. They can be plants, animals or tracks. A lot of the fossils found near Moab are dinosaurs.

The word dinosaur means terrible lizard, because dinosaurs are lizard-like and a lot of them were very scary! *Roar like a dinosaur and show me your claws and teeth!*

Activities:

Thinking Like a Scientist: Clues from Dinosaur Teeth and Tracks

What did dinosaurs eat? Scientists know what dinosaurs ate by looking at their *teeth* and their *tracks*. Some dinosaurs ate plants, such as sauropod dinosaurs. Sauropod dinosaurs had big, blunt, peg-like teeth for grinding plants. They often grew very large, and had sturdy feet without big claws—since they didn't need claws to eat plants. Meat eating dinosaurs (such as theropods) had long, sharp teeth for slicing through their prey and three toes with sharp claws that helped them move quickly and attack. *Replicate the two drawings at right on the board, and have students replicate them too using markers on paper. Which of these footprints would a meat-eater make? How about a plant-eater?*

Every animal has teeth that help us eat our diets effectively. Humans eat both meat and plants, and we have different teeth that help us do both. Have students finger on the teeth in the back of their mouth. These teeth are flat on top and good at grinding food. Now touch the pointy teeth nearer the front of your mouth. These are good for ripping food that is tough, like meat. Just like dinosaurs (and all animals!) our teeth are perfectly evolved for our diets! *On the back of the page that they drew dinosaur tracks, have them draw what they think the teeth of a meat-eating dinosaur (like T. Rex) would look like.*



Meat-eating theropod tracks (big claws).



Plant-eating sauropod tracks (no claws).

Dinosaur Fossilization Craft Project: students can make dinosaur 'fossils' and display them together as a dinosaur museum.

Materials:

- Homemade playdough (flour, salt, cream of tartar, water and Kool-Aid packets for color)
 - Recipe for Playdough: 2 cups flour, 1/2 cup salt, 2 Tbsp. Cream of Tartar, 2 Tbsp. vegetable oil, and 1 to 1 1/2 cups of boiling water (adding in small portions till it feels just right) Hint: add a few drops of glycerine for shine and stretch
- Shallow plastic food containers (City Market 6" long 4" wide and 2" deep)
- Plastic dinosaur toys
- Plaster of Paris (mixing bowl and spoon) (1 1/2 cup plaster and 1/2 cup water)

Directions:

1. Press playdough into a flat layer in a plastic container and have kids select a variety of toy dinosaurs to press it about halfway into the playdough.
2. Mix the Plaster of Paris and pour into the mold until it covers the playdough and dinosaur toy. Tap the container to release the bubbles.
3. Wait 45 minutes and flip over the mold and remove the playdough to "unearth" the dinosaur that has been preserved between the simulated rock layers.
4. Display the dinosaurs "fossils" as a museum. How do fossils form again? How do we behave when we visit museums?

Dinosaur Action Poem:

Ask students to stand and get ready to move/dance as the poem directs. Read aloud and have students echo each line.

Dinosaur, dinosaur spin around
Dinosaur, dinosaur make your feet pound
Dinosaur, dinosaur show your claws
Dinosaur, dinosaur snap your jaws
Dinosaur, dinosaur, blink twice and close one eye
Dinosaur dinosaur, stretch your neck to the sky
Dinosaur dinosaur wave your tail to the right and roar with all your might
Dinosaur, dinosaur, eat plants all day, till Utahraptor comes to scare you away

Moab Giants Field Trip Preparation:

Our class will be visiting Moab Giants, a wonderful place to see dinosaurs, tracks, and more! What have we learned together about dinosaur tracks? How will we behave when we have another teacher here to help us learn about dinosaurs?



Utah State Science Core Curriculum Standards:

Standard One: The Processes of Science, Communication of Science and the Nature of Science.

Objective One: Generating Evidence: Using the processes of scientific investigation.