

DINOSAUR DISCOVERY

Fossils and Excavation

See videos for the theory behind many of these activities

The Montessori method encourages children to explore real things. A real dinosaur fossil has been provided for your child to explore, touch, and discover.

Explaining Fossils - Begin by explaining what a fossil is (the remains of a plant or animal that lived in the past). Allow your child to feel and look at the fossil.

Study Real Dinosaur Bone - Ask your child how the fossil feels (smooth, rough, etc.). For older children, discuss how dinosaur fossils were formed over thousands of years and how over that time, a lot of the bone structure was replaced by minerals around it.

Dino Dig Kit

This activity can be messy! We suggest taking it outside or laying newspaper underneath it. Have your child take part in the set-up and define the workspace. This is a long process and will help your child learn patience.

Hammering - Have your child use the hammer and chisel to break off large chunks.

Brushing - When you can see the model fossil, have your child use the brush to reveal the details.

Assembly - Once all pieces are visible, use the guide to assemble your model.

Recreating the Dig - Using sand in a tub or taking the replica dinosaur bones to the playground, you can bury the bones and allow your child to rediscover and rebuild the model.

Make Your Own Fossil

The end product is not the important part of this activity. The process of mixing, measuring and pouring is what should be the focus. (Please take into consideration that while the dino dough is non-toxic, it does have gluten in it.)

Fossils and Excavation, continued

Dino Dough - You can mix the dino dough using two different methods. The first involves mixing two teaspoons of oil into the dry mixture and then adding two thirds of a cup of lukewarm water. Mix in a pot on the stove until the consistency of play-doh is achieved; knead until it becomes smooth. The second method is adding two teaspoons of oil into the dry mixture and then two thirds of a cup of boiling water to avoid using the stove. Let it cool down and then knead till smooth. Have your child help as much as possible in creating the dough.

Plaster Fossils - Put dino dough back into the container. Take one or two dinosaur figurines to make an impression. When the impression looks the way your child desires, mix up the plaster. Have your child mix one fourth of a cup of powder (half of the bag) with two tablespoons of water. Plaster sets very quickly so be ready to stir! Once mixed, pour plaster over dough and wait at least an hour for it to set. You can take the plaster out after an hour but allow a day for the plaster to fully harden and then you can break the impressions apart and sand or shape the edges of your fossil.

Dinosaur Critical Thinking

These activities develop vocabulary, concentration, visual discrimination, and critical thinking skills.

Cards and Chart - Organize the cards into four stacks by dinosaur (e.g. triceratops in one pile). Have your child take one stack and let them match the background color of the card to the color on the chart within the correct dinosaur column. Once one type of dinosaur has been matched by color, follow with the other three types of dinosaurs.

Matching Shape - Organize the cards by color into four stacks. Now your child is matching the shape to what dinosaur it belongs to as found on the top of the chart.

Just Cards - As a last step, the chart is no longer needed. Place all of the cards in one stack and have your child organize the cards into four stacks by color. Once complete, you can then mix up the cards again and have your child organize four stacks of cards by type of dinosaur.

Dinosaur Critical Thinking, continued

Recreate Chart - As a mastery activity, your child can take all of the cards and try to recreate the dinosaur chart without looking at it. They can bring it out at the end to check their work. If this is too challenging, place the chart to the side and your child can recreate the chart next to it.

The Detective Adjective Game - Hand child stack of cards. As a first step, ask them to hand you the type of dinosaur you are looking for and its color. The second step will involve you describing details about the card such as, "find the dinosaur with a very long neck on a yellow background."

The Rubbing Plates - For younger children, before starting the rubbing activity, tape down paper so it doesn't move around and cause frustration; use the rock crayons provided. Discuss why rubbing plates work, use objects around the house as a future extension to create your own rubbing. Older children can color in the detail once finished.

Extension Activities

These activities are not covered in our video training and may require additional items from home.

Dinosaur Books - There are a lot of great books with information about dinosaurs. Check some out from your local library or online.

Where Did They Live? - Print out pictures of many different kinds of dinosaurs. Have your child put them in categories depending on where they lived or where you would have found them: land, water, or air.

Dinosaur Tracks - Print out pictures of dinosaurs and their tracks and have your child match them together.

"Recycled" Dinosaur Model - Use cardboard boxes, plastic bottles, tape, leftover paper towel and toilet paper tubes to create your own dinosaur model. Let your imagination go crazy!

Dinosaur Skeleton Craft - Glue toothpicks, craft sticks, or Q-Tips to paper to create your own dinosaur skeleton.

Bonus: Dinosaur Puzzle - While this is not an official Montessori puzzle, we thought it would be a fun addition to the Toolbox and fit well with the theme.