



# Dino Dig



## What are fossils?

Fossils are a rock formation in which an animal or plant is buried and rock hardens over it over millions of years. Whenever an organism dies and is buried in the ground, it can start the fossilization process. The organism must first decompose or be broken down within the soil. Overtime, the rock around it will harden, leaving the impression of the organism in the rock. There are 4 different ways that fossils can be formed. The first way is permineralization. This means that minerals carried by water crystallize and create the shape of the plant or animal. The next way fossils can be formed is by natural casts. A natural cast occurs when water washes away the remaining bone or tissue, and leaves an impression. Amber preserved fossils are plants or animals that have become trapped in trees and then have been buried underground. These often include insects. Finally, trace fossils are impressions of the organism's activity. These often include nests, footprints, and leaves.



## What are fossils and where do they come from?

## What is a paleontologist?

A paleontologist's main job is to study how animals and plants lived on earth over many years by studying fossils. Paleontologists use many different tools to help them uncover fossils. For example, x-ray machines, shovels, chisels, and stone hammers to name a few.



# Dinosaur Dig

## Supplies Needed:

- 2 cups flour
- $\frac{3}{4}$  cup water
- 2 cups sand
- Elmer's glue
- Mixing bowl
- Mixing spoon
- Dinosaurs and sea shells
- Toothbrush
- Cotton swabs
- Craft sticks.

## Lets Get Started!

1. We need to make the soil, to do this mix the 2 cups of flour and  $\frac{3}{4}$  cup water until it is fully combined.
2. Next add 1 cup of sand until it is completely combined
3. Add 2-3 large squirts of glue, and then mix the glue completely into the mixture.
4. Repeat steps 2 and 3.
5. The last step is to form it into a ball and place the dinosaurs and seashells into the soil.
6. Let your fossils sit for 48 hours!

Now it's your turn to be a Paleontologist

Once the soil is completely dried it is time to use your paleontology tools and dig to find fossils! Use your craft sticks, cotton swabs, and toothbrush to find the fossils in the soil!

