

Test Date:

## How to Become a Fossil...

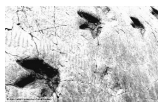

# FUN FOSSIL FACTS

## What Is a Fossil?

- A **fossil** is a trace or the remains of an organism (living thing) that died a long time ago. It takes thousands of years to become a fossil!
- Fossils are typically found in sedimentary rock.
- Fossils can be from plants and animals, but scientists find more animal fossils because animals have harder body parts, like bones, and teeth.



## Fossil Types

- **Trace (Imprint):** These are tracks that an animal leaves behind. If an animal steps in mud, the mud eventually changes into rock and the imprint can easily be seen. Plants also leave imprints. 
- **Body (True-form):** These fossils are the bones and teeth that were slowly replaced by minerals, but the 'bones' found look just like the animal's bones. 
- **Mold:** Formed when a plant or animal decays and it leaves a shape or empty cavity in the rock. Think of it as a Jello mold or muffin pan.
- **Cast:** Formed when the mold is filled up with mud and/or minerals. When separated from the mold, the cast will be the actual shape of the once-living plant or animal. Think of this as the Jello poured into the mold to create a shape.



- **Petrified Wood:** Formed when the soft parts of once-living plants are replaced with hard minerals.

### Step 1:

Soft plant and animal parts decompose, or rot away.

### Step 2:

The parts that don't rot away are covered with sediment.

### Step 3:

Over many, many years, the bone and sediment turn into rock.

### Step 4:

Earth's movement pushes rock closer to the surface. The wind and rain break apart the rock, and then fossils can be seen.

## PLANT NOTES

- There aren't many plant fossils because they rot away so quickly due to their soft parts.
- Scientists find many fossils of ferns because at one time, most plants on Earth were ferns.
- Petrified wood is a type of fossil where wood has turned to stone. The wood is slowly replaced with minerals.

## Digging and Discoveries

A **paleontologist** is a person who studies fossils and ancient life. They study fossils to learn more about animals and plants that are extinct. Something is **extinct** when it no longer exists. **Dinosaurs** and the **saber-toothed cat** are well-known extinct animals.

Scientists want to learn about extinct plants and animals, so they study the fossils left behind. By studying these fossils, a paleontolo-

gist can learn what type of food an animal ate by looking at the shapes of their teeth and jawbone. Animals with sharp teeth usually ate meat. **Some fossils give evidence of the environment an animal lived in** and can help scientists figure out if land was once covered by water, or if it was always dry land.

Scientists can also use fossils to see if animals have changed

over the years. **Some animals look the same as they did many years ago**, while others changed overtime. Many of the changes happened because animals needed to adapt to newer environments. An elephant and a woolly mammoth are alike because they both have tusks to fight similar-sized predators in their environments. However, the woolly mammoth had thick fur because it lived during the Ice Age. Today, elephants typically live in warm climates and do not need thick fur to keep them warm.