

# Learning from Dinosaur Fossils

by ReadWorks

Dinosaurs are a group of reptiles that lived long ago. The first dinosaurs walked the earth about 245 million years ago. For millions of years, they lived and thrived. Then, about 66 million years ago, the dinosaurs were wiped out when a huge event destroyed much of life on Earth. But scientists today are still able to learn about these interesting animals. They learn about them by studying what remains of the dinosaurs - fossils.



*Fossil of a fern*

A fossil is any evidence of life from long ago that is at least 10,000 years old. A fossil can be what's left of the bones or teeth of an animal. It can also be a footprint left behind by an animal. But fossils are not just remains of animals. They can also be remains of plants, like the impression of a fern left in a rock.



*Fossilized dinosaur skeleton at a museum*

Have you ever seen a picture of a dinosaur skeleton in a museum? The dinosaur bones you can see in a museum are actually fossils. But how did these fossils form from the dinosaur's bones? This happened over millions of years, through a process called fossilization. When the dinosaur whose fossils came from died, it may have been buried by sediments like sand and silt. As the dinosaur's body rotted, these sediments protected the bones from rotting. After many years, only the hard parts of the body were left behind. Over millions of years, the water in the rocks nearby surrounded those hard parts. Over time, the minerals in the water replaced the hard parts. So after millions of years, what was left was a solid rock copy of the dinosaur's bones - the fossils.



National Park Service

*Paleontologist working to unearth a fossil*

Scientists called paleontologists study dinosaur fossils to learn more about dinosaurs. They can learn about how dinosaurs lived, moved, ate, grew, and more by studying fossils. For example, they can look at the shapes and sizes of a dinosaur's teeth to see what kinds of food it most likely ate. They can study fossilized footprints to learn about how quickly a kind of dinosaur may have moved. And they can draw conclusions about how some dinosaurs behaved by studying some fossilized dinosaur eggs and nests.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. Dinosaurs are a group of reptiles that lived long ago. When did they first walk the earth?

- A. 66 million years ago
- B. 100 million years ago
- C. 245 million years ago
- D. 45 million years ago

2. What does the text describe?

- A. how scientists find and store fossils
- B. the process by which fossils form
- C. the huge event which destroyed much of life on Earth
- D. the ecosystems in which dinosaurs lived

3. Read the following sentences from the text.

Scientists called paleontologists study dinosaur fossils to learn more about dinosaurs. They can learn about how dinosaurs lived, moved, ate, grew, and more by studying fossils. For example, they can look at the shapes and sizes of a dinosaur's teeth to see what kinds of food it most likely ate. They can study fossilized footprints to learn about how quickly a kind of dinosaur may have moved.

Which conclusion does this information best support?

- A. Fossils can help us learn what living things from long ago were like.
- B. Fossils can help us understand how living things are currently changing.
- C. Fossils can help us come up with cures to diseases different living things face.
- D. Fossils can help us predict when there will be another huge event that will change earth.

4. Based on the text, what can be concluded about the area in which a fossil is found?

- A. It has stayed the same throughout the years.
- B. It has harmed animals that get close to the area.
- C. It has erased all signs of living things from long ago.
- D. It has changed throughout the years.

5. What is the main idea of this text?

- A. About 66 million years ago, dinosaurs were wiped out when a huge event destroyed much of life on Earth.
- B. Dinosaur fossils, or remains, formed over millions of years and can help scientists learn about these animals.
- C. Scientists can look at the shapes and sizes of a dinosaur's teeth to see what kinds of food it most likely ate.
- D. A fossil can be what's left of the bones or teeth of an animal, or it can also be a footprint left behind by an animal.