Why Are Fossils Important?

The word fossil comes from the Latin word *fossilis,* meaning "dug up." Today, the word generally refers to any evidence of past life, from insects preserved in amber to imprints of a dinosaur's foot.

To hold a fossil is to hold millions of years of history in the palm of your hand. The ridges, bumps, and curves of a fossilized clam are the same ridges, bumps, and curves that existed as it filtered water from the sea long ago. Studying fossils provides clues about the Earth's past, its climate, natural disasters, changing landforms, and changing oceans. Fossils tell about history and, like all good history, they help you to understand both the present and the future.

What Will You Investigate?

You and your group will be acting as detectives, trying to figure out how fossils form, where they form, and where they might be found today. In this way, you will be doing the work of a paleontologist, a geoscientist who studies life in prehistoric times by using fossil evidence.

Here are some of the things that you will investigate:

- why some things become fossils, but others do not;
- how the environment affects how fossils form;
- how fossils show the age of the Earth;
- how life has changed over time;
- what paleontologists do.