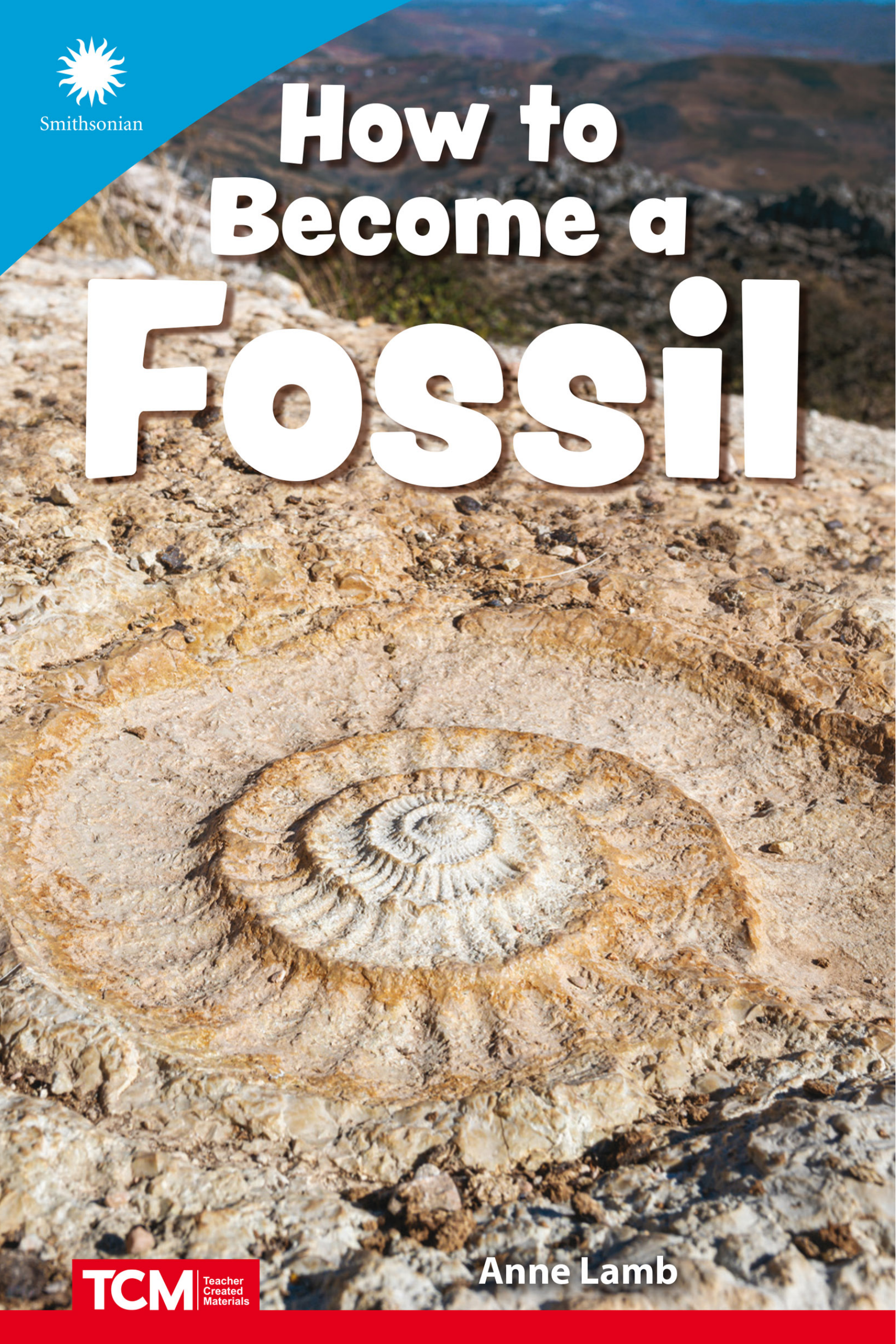




Smithsonian

How to Become a Fossil



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What Is a Fossil?

A fossil is the preserved remains of a **prehistoric** creature or plant that is at least 10,000 years old. These remains have been partly or totally replaced by minerals. Preserved traces of prehistoric creatures, such as footprints, are also fossils. Fossils have been found all over the world. Some fossils are put on display in museums, giving us a glimpse into the past.

Scientists use the word **fossilization** to describe how fossils form. There are many fossilization processes. They require certain conditions and create different types of fossils. For example, one type of fossilization creates leaves printed on rocks. Another creates preserved animal teeth or bones.



fossilized leaf

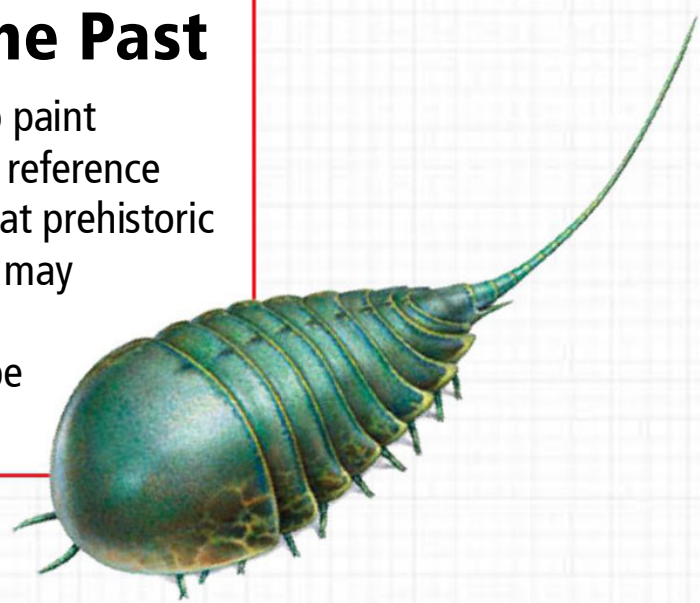
fossilized megalodon teeth



ARTS

Drawing from the Past

Some artists use their skills to paint pictures of Earth's past. They reference fossils to create images of what prehistoric animals and their ecosystems may have looked like. This type of art is called *paleoart*. It can be shown in 2D or 3D forms.



Some fossils are a hidden part of everyday life. Have you ever taken a bus? What about cooked on a gas stove? Fossil fuels, such as coal, oil, and natural gas, make those activities possible. However, they are a limited resource. **Extracting** them has a huge environmental impact.

People study fossils to learn about the past. Fossils tell us what kinds of animals and plants lived on Earth long ago. Also, fossils offer clues about Earth's geological cycles and climate changes.

Want to see how a fossil is made? All it takes is **organic** remains, the right set of geological conditions, and at least 10,000 years. But no need to wait—Earth already has a variety of fossils to explore!

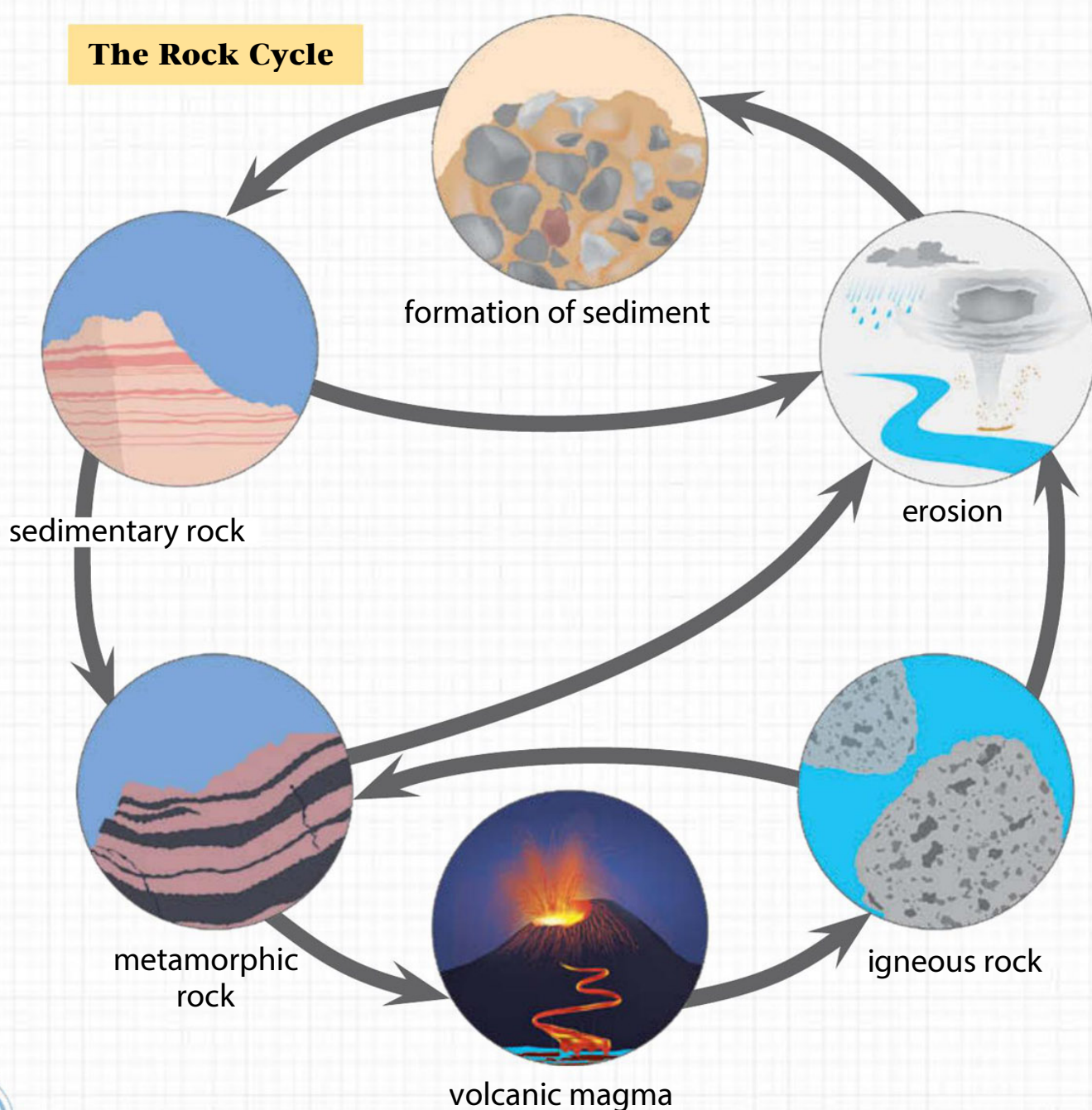


fossilized dinosaur skeleton

Crusty Stuff: Rock Basics

Before learning about how fossils are made, it helps to know about Earth's outermost layer—the crust. Some of the same processes that help make fossils also help shape Earth's crust.

Earth's crust is made of rocks, and rocks are made of minerals. But this doesn't mean the crust never changes. In fact, Earth's crust is constantly recycling its materials. This recycling process is known as the rock cycle. Earth's crust has three types of rocks: igneous, sedimentary, and metamorphic. They're all part of the rock cycle.



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