

# T3 Week 1 Lesson 1

## The Badlands

These rock formations are found in Badlands National Park in South Dakota. The colorful horizontal bands are layers of different kinds of sedimentary rock. **Sedimentary rock** is formed from sediment on Earth's surface. The sediment is deposited in layers on land or on the sea floor. Over millions of years, the layers harden into rock. The oldest layers are on the bottom, and the newer layers are on the top.

Each band of rock started out as a flat layer of sediments. The sediments included the remains of plants and animals. Some of those remains became **fossils**, or traces of plants and animals that lived long ago. Scientists use fossils to tell what kinds of organisms lived at the time the different layers of sediment were laid down. The location of certain fossils also indicates the order in which rock layers formed. Studying patterns of fossils and rock layers can help scientists understand how land changes over time.

Forces of wind and water erosion shape land across the Badlands region.

**30 MILLION YEARS AGO:**  
The light-colored layers include sandstone and layers of ash from volcanoes. Fossils of desert plants show that the land was very dry.

**Press to open the video.**

**Pull the slider.**

**Wrap It Up!**

## 1. What are fossils?

## 2. How do the layers of sedimentary rock form?

## 1. Where are the oldest layers usually found?