

# Welcome to Badlands National Park!



The light tan colored Sharps Formation (28 to 30 mya) was primarily deposited by wind and water as the climate continued to dry and cool.

The Rockyford Ash came from huge volcanic eruptions to the west. The volcanoes were in present day Nevada. The ash traveled in the air and settled here to form this gray layer.

## Teacher Answer Key

Environment: **Savannah** (continuing to become cooler & drier)

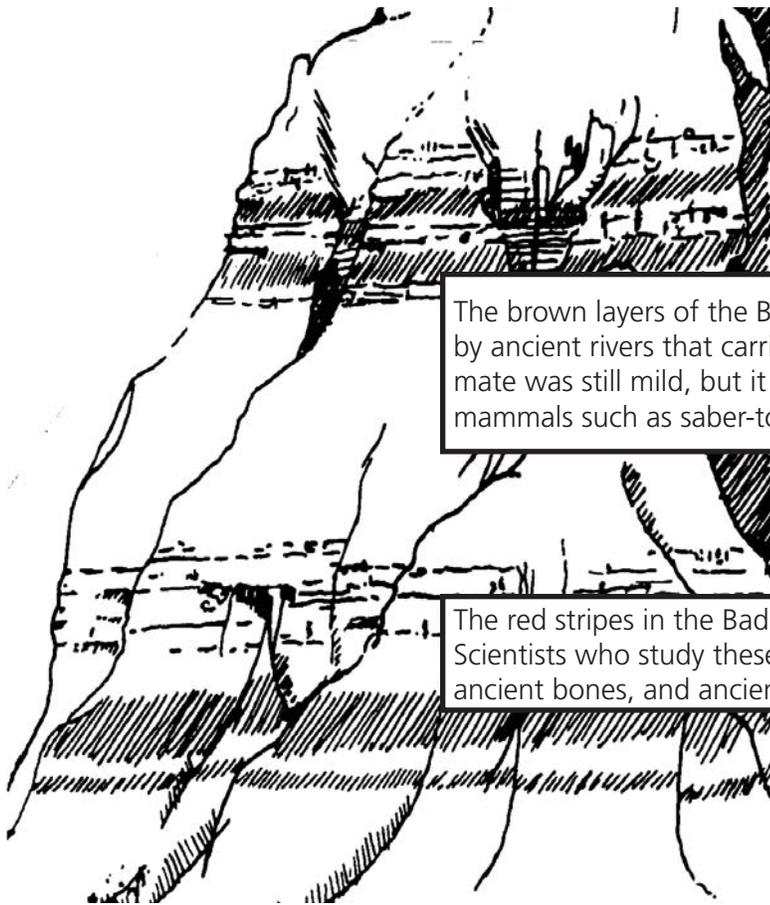
Fossils: **Meshippus, Oreodont, & Saber-toothed Cat** can be placed anywhere on this page or the next page.



## Teacher Answer Key

Environment: **Open Woodland (cooler & drier)**

Fossils: **Mesohippus, Oreodont, & Saber-toothed Cat** can be placed anywhere on this page or the top page.



The brown layers of the Brule Formation (30 to 34 mya) were deposited by ancient rivers that carried gravel, sand, and silt to this area. The climate was still mild, but it was beginning to get drier and cooler. Ancient mammals such as saber-tooth cats and three-toed horses ruled the land.

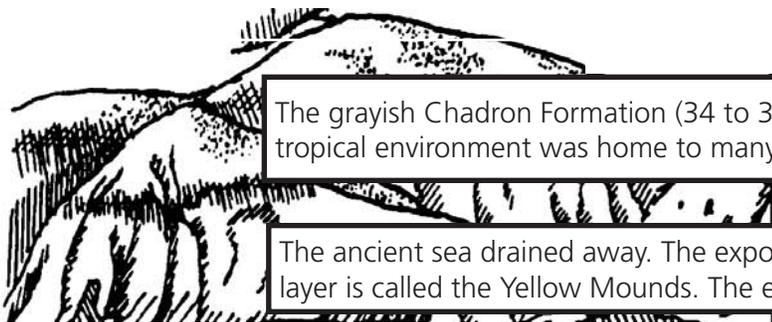
The red stripes in the Badlands are ancient fossilized soils called paleosols. Scientists who study these ancient soils have found fossil root traces, ancient bones, and ancient snail shells.



**Teacher Answer Key**

**Environment: Tropical**

**Fossils: Titanotherium & Alligator**



The grayish Chadron Formation (34 to 37 mya) was deposited by rivers and floods. This tropical environment was home to many animals such as alligators and titanotheres.

The ancient sea drained away. The exposed mud weathered into an ancient soil. This layer is called the Yellow Mounds. The environment was warm and wet.

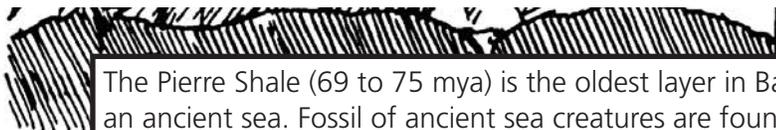
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**Teacher Answer Key**

**Environment: Sea**

**Fossils: Baculite & Ammonite**



The Pierre Shale (69 to 75 mya) is the oldest layer in Badlands. These black layers were deposited by an ancient sea. Fossil of ancient sea creatures are found here.