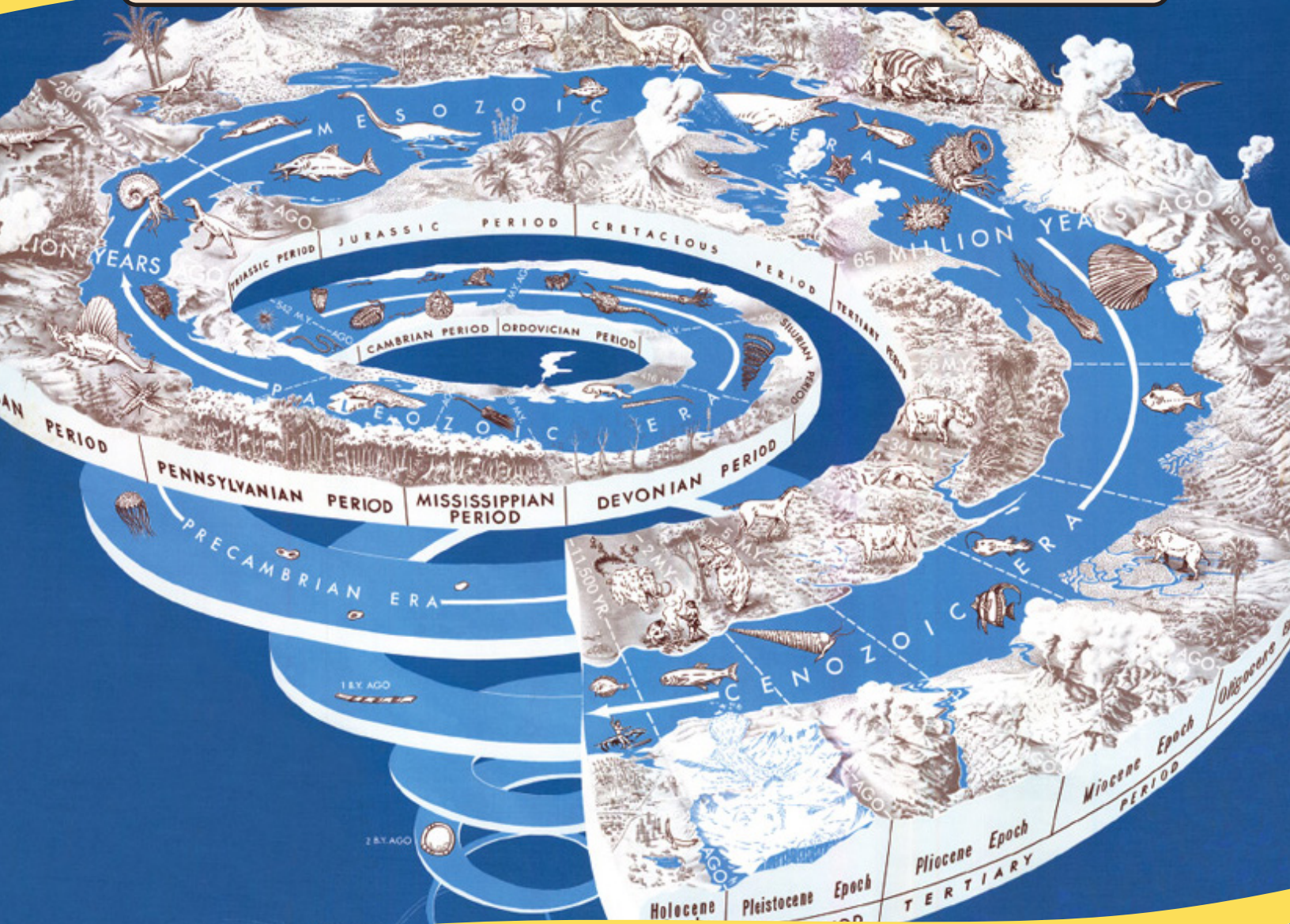


DINOS A to Z

Learn
BRIGHT

GEOLOGIC TIME

High-Interest Reading Comprehension



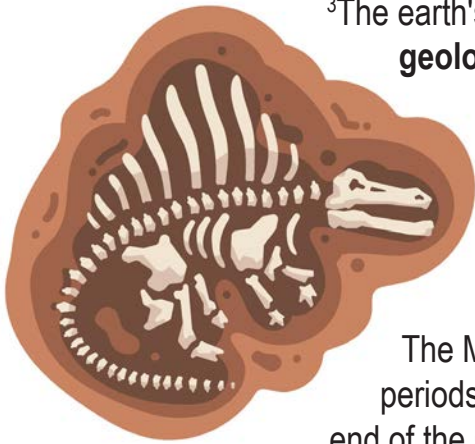
GRADE 2-4

- Instructional Page ▶ page 1
- Activity Page ▶ page 2
- Practice Page ▶ page 3

Dinos A to Z: Geologic Time

¹It's hard to imagine that the earth is around 4.5 billion years old! How do scientists know how old Earth is? Great question! A particular type of scientist studies the earth. We call that scientist a **geologist**. A geologist studies the earth's surface and what it is made of. They are part of the branch of science called **geology**, which means the study of rocks.

²Rocks have been around since Earth first formed. Geologists compare Earth's rocks to rocks gathered from space, like meteorites or the moon. Using special equipment, they can determine how old rocks are. **Fossils** are also helpful. Fossils are the remains or traces of plants and animals that lived long ago. Another branch of science studies fossils. It is called **paleontology** (pay-lee-un-tall-uh-gee).



³The earth's geologic events are recorded in rocks and fossils. This is called **geologic time**. Layers of rocks have accumulated over the billions of years the earth has been around. The oldest rocks are found in the bottom layers. The newest are on the top. Scientists organize Earth's history through the **geologic time scale**. Why is this important?

⁴Clues from fossils and rocks tell scientists that dinosaurs lived in the **Mesozoic** (mess-uh-zoh-ick) **Era**, when reptiles dominated the earth. The Mesozoic Era is known as the "Age of Dinosaurs." It is divided into three periods: Triassic, Jurassic, and Cretaceous. Dinosaurs became extinct at the end of the Cretaceous period. Next came mammals in the Cenozoic Era.

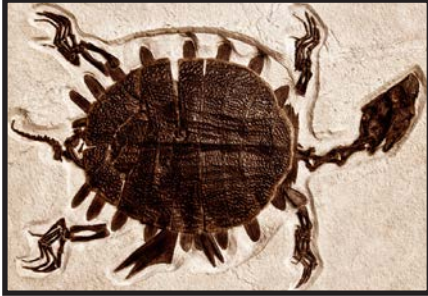
⁵Rocks and fossils contain history. Scientists can learn how the planet has changed over time. Geologic time helps explain the time when the earth was **molten** rock. It was too hot for life. It explains everything from the first dinosaurs to humans in the present! Scientists can use this information to predict what changes might happen in the future.





FOSSILS FOUND

Instructions: A paleontologist found some fossils and photographed them. Explain what they are and where they might have been found on the lines below. Then, draw your own fossil in the box!





Practice

Name _____ Date _____



Instructions: What did you learn? Answer the questions based on what you read.

1) Where are Earth's geologic events recorded?

2) What does a geologist do?

3) Why are the oldest rocks found on the bottom and the newest ones on the top?

4) In paragraph 2, the author uses the word *paleontology*. What word **best** describes the meaning of paleontology?

- a. study of rocks b. study of dinosaurs c. study of fossils d. study of time

5) What era was the "Age of Dinosaurs"?
