Earth’s History Study Guide

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is a fossil?

How do most fossils form?

What is evolution?

What is the relative age of a rock?

What is the law of superposition?

What is the effect that radioactive decay has on unstable elements?

What does radioactive decay allow scientists to determine?

What is the geologic time scale a record of?

What are the three major divisions of eras in the geologic time scale called?

What were the earliest life forms?

What did the evolution of photosynthetic organisms 2.5 bya lead to?

What major event happened at the end of the paleozoic?

What were the first vertebrates?

What is the hypothesis many scientists have as to why the dinosaurs went extinct?

Which era is divided into the Triassic, Jurassic, and Cretaceous periods?

What is an element’s half life?

What span of time does the geologic time scale begin with?

What era are we in now?

Which era is referred to as the age of the reptiles?

Be prepared to answer the following essay questions:

Explain the difference between relative and absolute dating and how it is used to date fossils.

Compare and contrast the atmosphere, oceans and continents between Early Earth (4.6 billion years ago) and Later Precambrian Earth (600 million year after Earth formed).

Describe how the life forms of the Paleozoic, Mesozoic, and Cenozoic eras changed.