

Geological Time Travel

Pack your bags! Today, you are going to time travel to beginning of time on Earth.

Warm Up Scavenger Hunt!

Before you can time travel, you need to get your “supplies” ready. Starting on page 501, use the textbook to help you find the answers to the following questions.

1. Geologic Time Scale
 - a. How old is the Earth?

 - b. What do scientist use to divided the Earth’s history?

 - c. For what is the geological time scale used?

2. Structure of the Time Scale
 - a. What are the four names used to divide Earth’s history, listed in order from largest to smallest span of time?

 - b. What the first era?

 - c. What is the current era?

 - d. What is the current period and how long ago did it begin?

 - e. What does Paleozoic mean?

 - f. What does Mesozoic mean?

 - g. Cenozoic mean?

 - h. What percentage of the Earth’s history does the Precambrian era represent?

 - i. Why isn’t the Precambrian subdivided into smaller time units?

Geo Time Travel

Activity: Around the room, you will find pictures and explanations of Earth's geological time scale. Use this information to fill in the chart. List three major events for each Era and the time period.

Time Scale Diagram:

Event	How Many Millions of Year Ago?
What influences the subdivision of Earth's history into periods and eras?	

Precambrian Era – TIME PERIOD:

Three Events
How old was Earth when life first began? What were the first life forms?
What happened during the Precambrian explosion? How is that important to evolution?
Describe Earth's early atmosphere? How did it change?

Paleozoic Era – TIME PERIOD:

Three Events

Roughly, when did the Cambrian explosion begin and what occurred that was different than the Precambrian explosion?

What happened during the Cambrian explosion? How is that important to evolution?

Define the term “fossil record” and explain how viable fossils are formed.

What are some of the reasons scientist believe new life forms evolved in abundance during the Cambrian period.

Mesozoic Era – TIME PERIOD:

Three Events

How do you think Pangaea breaking apart contributed to evolution?

Describe the plant and animal life during the Mesozoic life?

What major evolutionary change occurred for plants during this time period?

Cenozoic Era – TIME PERIOD:

Three Events

What major event allowed for the diversification of mammals?

In relation to you and me, what major event occurred in the Cenozoic era? When did this event first begin?

What major event has changed the planet? About when did this event begin?