

1. What is a significant piece of evidence that was used in the 1800s to suggest Earth is very old?

During the 1800s, geologists, paleontologists, and naturalists found several forms of physical evidence that confirmed that Earth is very old. Sedimentary layers of the Earth are a significant piece of evidence. The rock layers represent the order in which rocks and fossils appeared, paleontologists were able to trace the history of Earth and life on Earth.

2. Relative to the length of time life has been on Earth, have modern humans appeared recently or in the distant past?

Homo sapiens began to appear around 200,000 years ago. The appearance of homo sapiens was somewhat recent, as for simple cells that appeared in the distant past.

3. What types of geological events help define geological time scales?

The time scales can be used to show when both geologic events and events affecting plant and animal life occurred. Events such as Earthquakes, volcanic eruptions, major erosion, meteorites hitting Earth, mass extinctions, and first signs of life forms helped define the geological time scale.

4. When did life on Earth begin? What was the first form of life?

Life on Earth began about 3.5 to 4 billion years ago. The first life forms were single-celled organisms similar to bacteria. The first forms of life were very basic in structure and form.

5. What was the Cambrian Explosion?

The Cambrian explosion was an event approximately 541 million years ago in the Cambrian period all major animal phyla started appearing in the fossil record. Ecosystems became much more complex and made the Earth's environment more suitable for a wider variety of life forms.