

History of Paleozoic Life

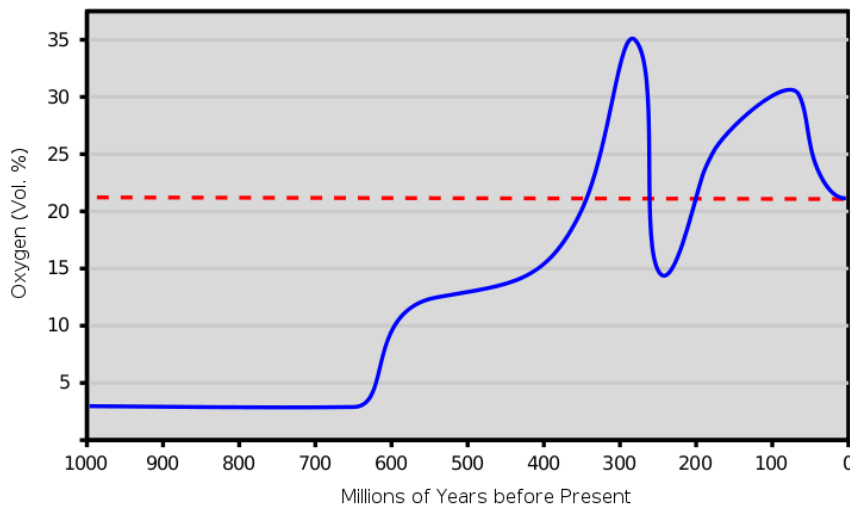
Paleozoic Life

- During the Paleozoic Era many life forms moved from the oceans and onto land. Shallow seas covered the lands, so many marine organisms began to evolve.
- The **Cambrian Explosion** was a mass evolution of life on Earth that occurred during the Paleozoic Era. Arthropods, fish, amphibians, and reptiles all originated at this time. Land plants began to colonize during the Ordovician period of the Era, and flourished during the Carboniferous period.

Study Tip

The Cambrian Explosion is similar to the Big Bang—both were “explosions of life.”

Oxygen Content of Earth's Atmosphere
during the Course of the Last Billion Years



The Cambrian Explosion occurred at the same time as when Oxygen content jumped from 3% to 12%.

Mass Extinctions

- Various mass extinctions separate periods within the Paleozoic Era. In between each period, life forms would evolve.
- The largest mass extinction occurred 250 million years ago at the end of the Permian period, where 95% of marine species on earth went extinct and 70% of vertebrate species went extinct. Climate change, volcanoes, and asteroid impacts may have caused this extinction.

Concept Check

- What kinds of animals evolved during the Paleozoic Era?
- What may have caused the Permian extinction?