

FULL EARTH HISTORY TIMELINE

4.6 Billion Years to Present

4.6 - 4.0 BYA

HADEAN EON

Formation of the Solar System and Earth. Solidification of the crust.

- Formation of the Moon via giant impact
- First oceans condense from water vapor

4.0 - 2.5 BYA

ARCHEAN EON

Earth cools significantly; first life forms appear.

- Origin of life (Prokaryotes)
- Evolution of photosynthesis (Cyanobacteria)

2.5 BYA - 541 MYA

PROTEROZOIC EON

Oxygenation of the atmosphere and rise of complex cells.

- Great Oxidation Event
- First Eukaryotic cells and multicellular life
- Snowball Earth periods

541 - 252 MYA

PALEOZOIC ERA

The "Cambrian Explosion" and colonization of land.

- Diversity of marine invertebrates
- Plants and amphibians move to land
- Permian Mass Extinction (The Great Dying)

252 - 66 MYA

MESOZOIC ERA

The Age of Reptiles and the breakup of Pangea.

- Rise and dominance of Dinosaurs
- First mammals and flowering plants
- K-Pg Extinction (Asteroid impact)

66 MYA - Present

CENOZOIC ERA

The Age of Mammals and the rise of civilization.

- Diversification of mammals and birds
- Appearance of early hominids (6 MYA)
- Modern humans and the Holocene epoch