

# GEOLOGIC TIME SCALE

## Earth Science Reference Chart

### **4.6 - 4.0 Billion Years Ago** **Hadean Eon**

Formation of Earth and the Moon. Cooling of the crust and atmosphere formation.

- Molten Earth surface
- Heavy bombardment period

### **4.0 - 2.5 Billion Years Ago** **Archean Eon**

Continental shields begin to form. The emergence of the first single-celled life forms.

- First prokaryotes
- Oxygenation begins via cyanobacteria

### **2.5 Billion - 541 Million Years Ago** **Proterozoic Eon**

The Great Oxygenation Event. Development of multicellular life and supercontinents.

- Eukaryotic cells appear
- Rodinia supercontinent

### **541 - 252 Million Years Ago** **Paleozoic Era**

Explosion of marine life diversity. Plants and animals colonize land surfaces.

- Cambrian Explosion
- Great Permian Extinction

### **252 - 66 Million Years Ago** **Mesozoic Era**

Age of the Dinosaurs. Breakup of Pangea and appearance of flowering plants.

- Rise of Reptiles
- K-Pg Asteroid Event

## **66 Million Years Ago - Present Cenozoic Era**

Age of Mammals. Cooling of the global climate and the rise of human civilization.

- Modern continents positions
- Pleistocene Ice Ages