

Name _____

The Age of Dinosaurs: How Do We Know When It Started and Ended?



The “Age of Dinosaurs” was a time long ago when giant reptiles ruled the Earth. This era is officially called the Mesozoic Era, and it lasted for about 180 million years. It began around 250 million years ago and ended about 65 million years ago. Scientists divide this time into three parts: the Triassic, Jurassic, and Cretaceous periods.

Dinosaurs first appeared in the Triassic period. They were not very big at first, but they started to grow larger over time.

During the Jurassic period, more kinds of dinosaurs developed. Some, like the long-necked Brachiosaurus, were plant-eaters. Others, like the fierce Allosaurus, ate meat. In the Cretaceous period, famous dinosaurs like Tyrannosaurus rex and Triceratops walked the land.

Life was very different back then. The land, weather, and plants all changed during the Mesozoic Era. There were no people yet, and mammals were small and few. Birds began to appear, and so did flowering plants. The world was warm, and there were no icy polar caps.

But how do we know all this happened so long ago? Scientists study rocks and fossils to learn about the past. Fossils are the remains or traces of living things, like bones or footprints, that have turned to stone. By finding dinosaur fossils in different layers of rock, scientists can tell when those animals lived.

To figure out exact ages, scientists use special tools that measure radioactive materials in rocks. This process is called radiometric dating. It helps scientists know how old the rocks (and fossils in them) really are.

The Age of Dinosaurs ended with a big event—a giant asteroid hit the Earth. This caused huge fires, dust clouds, and changes in the climate. Many animals, including dinosaurs, could not survive. This event marked the end of the Cretaceous period and the start of a new era.

Thanks to fossils and science, we can now picture what Earth looked like during the Age of Dinosaurs and understand how it changed over millions of years.