

Geologic Time Scale

Precambrian		Paleozoic						
Archean	Proterozoic	Cambrian	Ordovician	Silurian	Devonian	Mississippian	Pennsylvanian	Permian
4-2.5 Billion	2.5 Bil.-540 Mil.	540-490 Mya	490-445 Mya	445-423 Mya	423-372 Mya	359-331 Mya	323-304 Mya	299-254 Mya
Bacteria, microfossils, Fossils Rare	Multi-celled eukaryotes, Fossils Rare	Chordates, Trilobites, Worms, Sponges, brachiopods, anomalocarid s, fungi, algae	Cephalopods, corals, brachiopods, bivalves, nautiloids, trilobites, ostracods, bryozoa, crinoids, cystoids, starfish, graptolites, conodonts all appear, green plants	Vascular plants, millipedes, fishes, sea scorpions,	Mosses, horsetails, ferns, seed-bearing plants, trees, wingless insects, amphibians,	Land vertebrates, rhizodonts, sharks, trilobites and nautiloids die off	Winged insects, reptiles,	Pelycosaur s, therapsids, 95% of life goes through an extinction-level event.
Ontario, Quebec, Antarctica land is formed	Australia forms, oxygen in the air, Parts of North America and Africa	Land continues to form, an Ice age	An ice age ends	England, Ireland, Scotland, Scandinavian Mountains	Appalachian Mountains form, Mountains in North Africa	Large Glaciers	Europe and Asia building mountains	Pangea forms, Appalachians get larger, Glaciation,

Mesozoic			Cenozoic		
Triassic	Jurassic	Cretaceous	Paleogene	Neogene	Quaternary
252-209 Mya	201-152 Mya	145-72 Mya	66-28 Mya	23-4 Mya	3 Mya-Present
Dinosaurs, ichthyosaurs, nothosaurus, pterosaurs, mammals, crocodiles, modern corals, modern insects,	Conifers, an abundance of dinosaurs, first birds and lizards, bivalves, ammonites, sea urchins,	Flowering plants, new insects, modern fish, new dinosaurs, modern sharks, placental mammals	Modern and large mammal families, whales, grasses, large mammals, extinction of dinosaurs,	Horses, mastodons, apes, widespread forests,	Humans, agriculture, stone age, bronze age, iron age,
Andes Mountains form, central Asian mountains, New Zealand	Pangea breaks up, Sierra Nevadas, CO2 is 4-5 times higher than the present	Continued landmass breakups, Rocky Mountains	Himalayas and Alps begin, Greece forms, Ice Age, CO2 lowers	Ice Ages, Carpathian Mountains, CO2 Lowers	Drastic temperature changing events, volcanic winters, Ice ages, Sahara Desert, North American Glaciers, Rise in CO2