Paleozoic Era

Cambrian Pd. (570 mya-505 mya)	Oldest rocks with abundant fossils; lands low; climate mild and wet.
	Algae; bacteria and cyanobacteria; fungi.
	Age of marine invertebrates; modern and extinct animal phyla represented; first chordates.
Ordivician (505-438 mya)	Sea covers most continents.
	Marine algae dominant; fossil spores of terrestrial plants.
	Invertebrates dominant; coral reefs appear; first fishes appear.
Silurian (438-408 mya)	Most continents remain covered by seas; climate warm.
	Algae dominant in aquatic environments; vascular plants appear.
	Jawless fishes diversify; coral reefs common; terrestrial arthropods.
Devonian (408-360 mya)	Glaciers; inland seas.
	Vascular plants diversify and become well established; first forests; gymnosperms appear; bryophytes appear.
	Many trilobites; fishes with jaws appear and diversify; amphibians appear; wingless insects appear.
Carboniferous (360-286 mya)	Lands low and swampy; climate warm and humid; becoming cooler later.
	Forests of ferns, club mosses, horsetails, and gymnosperms; mosses and liverworts.
	First reptiles; spread of ancient amphibians; many insect forms; ancient sharks abundant.
Permian (286-248 mya)	Glaciers; continents rise and merge as Pangaea; climate variable.
	Conifers diversify; cycads appear.
	Modern insects appear; mammal-like reptiles; extinction of many Paleozoic invertebrates and vertebrates at end of Permian.

Mesozoic Era

Triassic (248-213 mya)	Many mountains form; widespread deserts; climate warm and dry.
	Gymnosperms dominant; ferns common.
	First dinosaurs; first mammals.
Jurassic (213-144 mya)	Continents low; inland seas; mountains form; continental drift begins; climate mild.
	Gymnosperms common.
	Large, specialized dinosaurs; first toothed birds; primitive insectivorous mammals diversify.
Cretaceous (144-65 mya)	Continents separate; most continents low; large inland seas and swamps; climate warm.
	Rise of flowering plants.
	Dinosaurs reach peak, then become extinct at end; toothed birds become extinct; primitive mammals.

Cenozoic Era

<u>Tertiary Period:</u>	
Paleocene Epoch (65-55 mya)	Continental seas disappear; climate mild to cool and wet.
	Semitropical vegetation (flowering plants and conifers) widespread.
	Primitive mammals diversify rapidly.
Eocene (55-38 mya)	Climate warmer.
	Flowering plants dominant.
	Modern mammalian orders appear and diversify; modern bird orders appear.
Oligocene (38-25 mya)	Rise of Alps and Himalayas; most land low; volcanic activity in Rockies; climate cool and dry.
	Spread of forests; flowering plant communities expand.
	Apes appear; present mammalian families are represented.
Miocene (25-5 mya)	Mountains form; climate drier and cooler.
	Flowering plants continue to diversify.
	Great diversity of grazing mammals and songbirds.
Pliocene (5-2 mya)	Uplift and mountain-building; volcanoes; climate much cooler; North and South America join at Isthmus of Panama.
	Expansion of extensive grasslands and deserts; decline of forests.
	Many grazing mammals; large carnivorous mammals; first known human-like primates.
<u>Quaternary Period:</u>	
Pleistocene (2 mya-10000 ya)	Multiple ice ages; glaciers in Northern Hemisphere.
	Extinction of some plant species.
	Extinction of many large mammals at end.
Holocene (10000 ya to present)	End of last Ice Age; warmer climate; higher sea levels as glaciers melt.
	Decline of some woody plants; rise of herbaceous plants.
	Age of *Homo sapiens*.