

## Geologic Time Scale

## \*MYA means millions of years ago

Era	Period	Epoch	MYA*	Plant and Animal Development
Cenozoic	Quaternary	Holocene	0.01	First written language, Beginning of human history
		Pleistocene	1.6	Modern humans, Many extinctions
	Tertiary	Pliocene	5	First hominids
		Miocene	23	Rodents, grasses, kelp
		Oligocene	35	Modern mammal families
		Eocene	57	First whales
		Paleocene	65	Carnivorous mammals, monotremes
	Cretaceous-Paleogene Extinction			
Mesozoic	Cretaceous		145	Many extinctions, including dinosaurs and sea reptiles, first flowering plants
	Jurassic		208	First rays, first birds, dinosaur diversity/dominance
	Triassic-Jurassic Extinction			
	Triassic		245	First dinosaurs and mammals
	Permian-Triassic Extinction			
Paleozoic	Permian		290	First mammal-like reptiles
	Carboniferous		360	First tetrapods, large coal swamps
	Late Devonian Extinction			
	Devonian		408	First insects
	Silurian		440	Fish dominant, first land plants
	Ordovician-Silurian Extinction			
	Ordovician		510	First fishes with jaws, first fishes with cranium
	Cambrian		570	Oldest bone fragments, first organisms with shells
Precambrian			4650	First one-celled and multicelled organisms, oldest life on earth, origin of Earth

Source: Martin, R. A. (2003)

A project of CA NGSS K–8 Early Implementation Initiative.