

Types of Fossil Types

Trace Fossil	Molds and casts	Replacement	Petrified	Amber	Original Material
Any indirect material that's left by an organism	An impression in rock, may be filled with sediment	Original Material is replaced with crystal	Empty pore spaces are filled with crystal	The whole organism is preserved in tree sap	Mummification or freezing preserves the material

The Geologic Time Scale

Era	Mya	Major Events - Environment	Major Events - Living Things	
Precambrian	4600	Earth Forms	Oldest fossils of Prokaryotes	
			Oldest fossils of Eukaryotes	
			Multicellular organisms appear	
			Invertebrates and algae diversify	
			Soft bodied organisms appeared	
Paleozoic	488.3	Swampy forests dominate the land	Cambrian Explosion	
		Mass extinction ended the era	All body plans arise	
			Vertebrates and plants appear	
			Land plants and insects appear	
			Sharks and bony fish appear	
			Insects scatter	
			Amphibians appear	
			Ferns and evergreens make up forests	

Era	Mya	Major Events - Environment	Major Events - Living Things	
			Reptiles Scatter	
Mesozoic	199.6	Meteorite strike	First mammals appear	
			Dinosaurs appear	
			Gymnosperms are dominant	
			Forests are lush	
			Dinosaurs scatter	
			First birds appear	
			Dinosaur population peaks	
			Flowering plants appear	
Cenozoic	55.8	Climate is tropical	Mammals, birds, and insects scatter	
		Climate is mild	Most mammal orders exist	
		Climate is cooler	Flowering plants scattered	
		Ice ages occur	Monkeys appear	
			Apes appear	
			Flowering plants are dominant	
			Hominins appear	
			Modern Humans appear	
			Humans form civilizations	