Time Scale of the Earth

EON	ERA	PERIOD	EPOCH	BEGINNING	MAJOR EVENTS	GLOBAL EXTINCTION EVENT
PHANEROZOIC	Cenozoic (age of mammals)	Quaternary	Holocene	11,477±85	present climate; only modern humans	
			Pleistocene	1,810,000	recent ice ages; various human species	
		Tertiary	Pliocene	5,300,000	near-human species and other near-modern mammals	
			Miocene	23,000,000	apes flourish; savanna grazing animals evolve	
			Oligocene	33,900,000	monkeys, apes, and other mammal families evolve	
			Eocene	55,800,000	prosimians flourish; possible early monkeys	
			Paleocene	65,500,000	earliest primates (proto-prosimians)	
	Mesozoic (age of reptiles)	Cretaceous		145,500,000	archaic mammals and birds begin to replace dinosaurs; flowering plants	65,500,000 (76% of species lost)
		Jurassic		199,600,000	dinosaurs dominant; primitive mammals spread; toothed birds	
		Triassic		251,000,000	first dinosaurs and first egg-laying mammals	200,000,000 (80% of species lost)
	Paleozoic (ancient life forms)	Permian		299,000,000	spread of reptiles and insects; first mammal-like reptiles	251,000,000 (95-96% of species lost)
		Carboniferous		359,200,000	amphibians dominant; forests flourish; reptiles and modern insects appear	
		Devonian		416,000,000	fish dominant; amphibians appear; first forests	360,000,000 (83% of species lost)
		Silurian		443,700,000	first land plants; fish with jaws; air breathing animals	
		Ordovician		488,300,000	invertebrates dominant; first vertebrates (jawless fish)	444,000,000 (85% of species lost)
		Cambrian		542,000,000	invertebrates dominant (worms, jellyfish, trilobites, etc.)	488,000,000? (% of species lost ?)
PRECAMBRIUM	Proterozoic (earliest life forms)			3,000,000,000	protozoa, sponges, and algae	
				3,500,000,000	first clear evidence of life (one celled bacteria)	
	Azoic (no life forms)			4,540,000,000	origin of the earth	

"BEGINNING" refers to the number of years before the present to the beginning of the Era, Period, or Epoch. In some cases, the dates differ somewhat from those in other geologic time scales. Most notably, the origin of the earth is sometimes given as 4.5 or 6 billion years ago.