

THE GEOLOGICAL TIME SCALE

ERA	PERIOD	EPOCH	AGE (MYA)	ORIGIN OF NAME
Cenozoic (Greek for recent life)	Quaternary	Holocene	0.01	Greek for wholly recent
		Pleistocene		Greek for most recent
	Tertiary	Pliocene	1.6	Greek for more recent
		Miocene	5.3	Greek for less recent
		Oligocene	24	Greek for slightly recent
		Eocene	37	Greek for dawn of the recent
		Paleocene	58	Greek for early dawn of recent
				66
Mesozoic (Greek for middle life)	Cretaceous			Chalk in southern England
	Jurassic		144	Jura Mountains, Switzerland
	Triassic		208	Rocks in Germany (<i>tri</i> = three)
Paleozoic (Greek for old life)	Permian		245	Province of Perm, Russia
	Pennsylvanian		286	State of Pennsylvania
	Mississippian		320	Mississippi River
	Devonian		360	Devonshire, county of England
	Silurian		408	Silures, Celtic tribe of Wales
	Ordovician		438	Ordovices, Celtic tribe of Wales
	Cambrian		505	Cambria, Roman for Wales
Precambrian			570	Before Cambrian
			4500	

ERAS. Geological eras include major spans of time based on the life-forms that have been found in rocks of that age.

PERIODS. The geological periods are based on less-well-defined features than eras are. It took nearly 100 years to come up with the divisions for the periods. The names and time spans covered by the periods are based on rocks that crop out in the United Kingdom, Germany, Switzerland, Russia, and the United States. Some names are based on the geographic areas where the rocks appear at Earth's surface (like Jurassic). Other names are based on the characteristics of the rocks themselves (like Cretaceous).

EPOCHS. Epochs are subdivisions of the Tertiary and Quaternary periods. English geologist Charles Lyell came up with these subdivisions after he studied marine layers of sedimentary rocks in France and Italy. These names are based on the percentage of fossils in the rocks that are represented by animals and plants still living today. The other periods are also divided into epochs, but those epochs are used mainly by geologists specializing in the rocks that were deposited during those times.