

Eon	Era	Period	Epoch	Time Began (Million Years)	
Phanerozoic	Cenozoic	Quaternary		Holocene	0.01
				Pleistocene	1.8
		Tertiary	Neogene	Pliocene	5.3
				Miocene	23.0
			Paleogene	Oligocene	33.9
				Eocene	55.8
				Paleocene	65.5
	Mesozoic	Cretaceous			146
		Jurassic			200
		Triassic			251
	Paleozoic	Permian			299
		Carboniferous	Pennsylvanian		318
			Mississippian		359
		Devonian			416
		Silurian			444
Ordovician			488		
Cambrian			542		
Proterozoic				2500	
Archean				4000	
Hadean				4560	

ERA	PERIOD/ SYSTEM	MILLIONS YEARS AGO	PREDOMINANT ROCK TYPES IN INDIANA	PRINCIPAL FOSSIL TYPES IN INDIANA	
CENOZOIC	QUATERNARY	2.6	Unconsolidated deposits - glacial till, sand, gravel, silt, marl, clay, and peat deposited during and after continental glaciation	Mastodon, mammoth, peccary, dire wolf, saber-toothed cat, gastropods, pelecypods, plants, and pollen	
	TERTIARY		Unconsolidated sediment consisting of clay, mud, gravel, sand, and silt	Short-faced bear, peccary, camels, snakes, rodents, fishes, birds, and turtles	
MESOZOIC	CRETACEOUS	65.5	None present	None present	
	JURASSIC	145.5	None present	None present	
	TRIASSIC	199.6	None present	None present	
PALEOZOIC	PERMIAN	251	None present	None present	
	CARBONIFEROUS	PENNSYLVANIAN	299	Shale, sandstone, mudstone, clay, coal, limestone, and conglomerate	Lycopods, <i>Calamites</i> , seed ferns, true ferns, <i>Cordaites</i> , and amphibians
			318.1	Shale, sandstone, siltstone, limestone, and gypsum	Crinoids, brachiopods, cephalopods, corals, molluscs, trilobites, bryozoans, fishes, arthropods, and foraminifera
		DEVONIAN	359.2	Upper part: carbonaceous shale Lower part: limestone, dolostone, and shale	Corals, brachiopods, cephalopods, trilobites, pelecypods, and bryozoans
	SILURIAN	416	Dolostone, limestone, siltstone, and shale	Corals, stromatoporoids, bryozoans, brachiopods, trilobites, gastropods, pelecypods, crinoids, and eurypterids	
	ORDOVICIAN	443.7	Upper part: shale and limestone Lower part: limestone, dolostone, and sandstone*	Cephalopods, trilobites, brachiopods, bryozoans, crinoids, pelecypods, and gastropods	
		CAMBRIAN	488.3	Sandstone and dolostone*	Trilobites, brachiopods, and sponges
	PRECAMBRIAN	542	Granite, marble, gneiss, and other igneous and metamorphic rock types*	Microbes	
			4,600		

* Present only in the subsurface

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Geologic time dates from U.S. Geological Survey, 2010, Divisions of geologic time—major chronostratigraphic and geochronologic units: U.S. Geological Survey Fact Sheet 2010-3059.

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