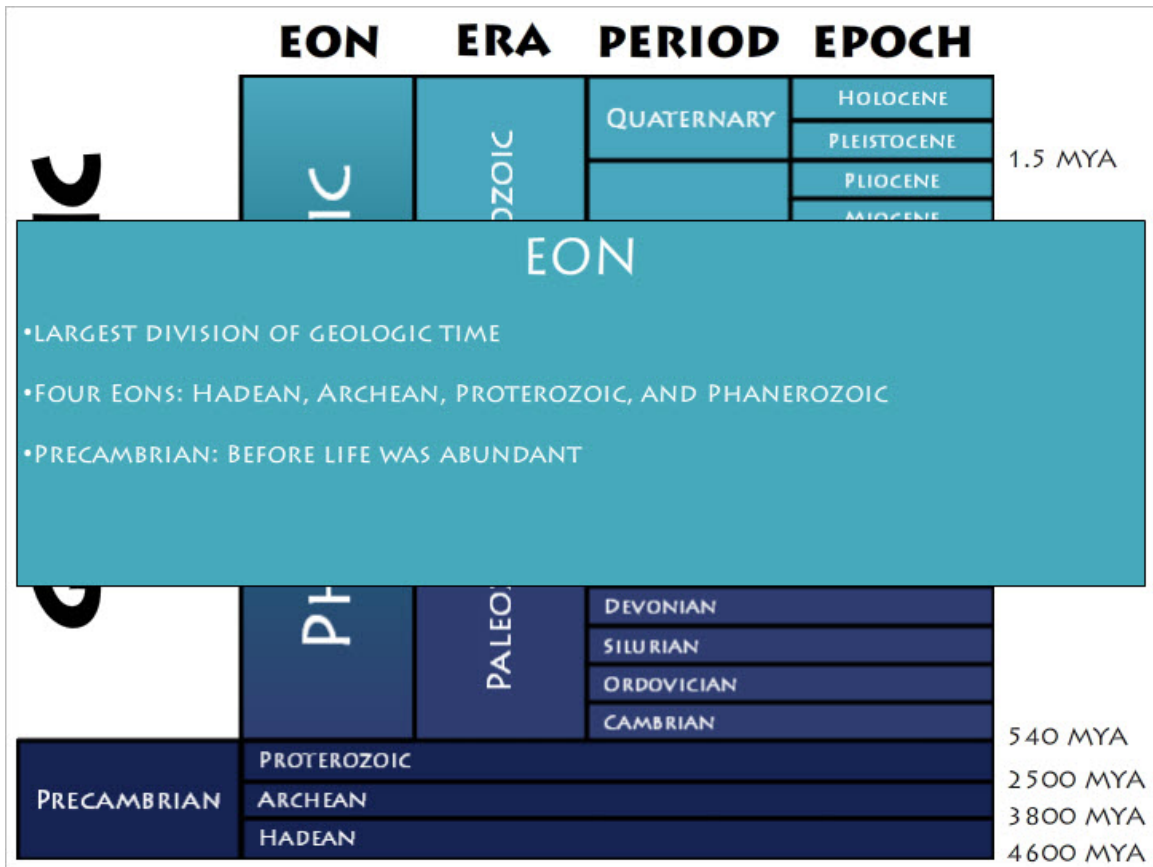


Module 9: Earth's History
Topic 3 Content: Geologic Time Divisions Notes

		EON	ERA	PERIOD	EPOCH		
GEOLOGIC TIME	PHANEROZOIC	PHANEROZOIC	CENOZOIC	QUATERNARY	HOLOCENE	1.5 MYA	
					PLEISTOCENE		
				TERTIARY	PLIOCENE	23 MYA	
					MIOCENE		
					OLIGOCENE		
					EOCENE		
					PALEOCENE		
			MESOZOIC	CRETACEOUS	250 MYA		
				JURASSIC			
				TRIASSIC			
				PERMIAN			
				PENNSYLVANIAN			
				MISSISSIPPIAN			
			PALEOZOIC	DEVONIAN	540 MYA		
				SILURIAN			
				ORDOVICIAN			
				CAMBRIAN			
				PROTEROZOIC		PRECAMBRIAN	2500 MYA
						ARCHEAN	
HADEAN							
					3800 MYA		
					4600 MYA		

Paleontologists have created four separate divisions of geologic time. These divisions are eons, eras, periods, and epochs, and they are created based on events that are observed with fossils or other pieces of crucial evidence. Take a few moments to see how the history of Earth is structured as a whole. Then click ***NEXT*** to see how these divisions of geologic time are structured.

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The largest division of geologic time devised by paleontologists is the eon. Eons can account for billions of years. There are four eons in all of Earth's history. The eons are named the Hadean, Archean, Proterozoic, and Phanerozoic. The Hadean, Archean, and Proterozoic eons are all grouped together and referred to as Precambrian Time. The Phanerozoic Eon accounts for the most recent 540 million years. The term Phanerozoic is derived from the Greek words *phaneros*, meaning "visible" or "evident," and *zoion*, meaning "animal." The Phanerozoic Eon is the span of time where life has flourished and diversified. The Precambrian is the span of time before life was abundant. Later, paleontologists discovered fossilized organisms that date back to the late Precambrian. As a result of this discovery, scientists further divided the Precambrian into three eons.

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EON		ERA	PERIOD	EPOCH	
CENOZOIC	PHANEROZOIC	CENOZOIC	QUATERNARY	HOLOCENE	1.5 MYA
				PLEISTOCENE	
				PLIOCENE	
				MIOCENE	
ERA •SECOND LONGEST UNIT OF GEOLOGIC TIME •ONLY THE PHANEROZOIC EON IS DIVIDED INTO ERAS: PALEOZOIC, MESOZOIC, AND CENOZOIC •ERAS ARE NAMED BASED ON THE TYPE OF LIFE					
PRECAMBRIAN	PROTEROZOIC	PALEOZOIC	DEVONIAN		540 MYA
			SILURIAN		
			ORDOVICIAN		
			CAMBRIAN		
					2500 MYA
					3800 MYA
					4600 MYA

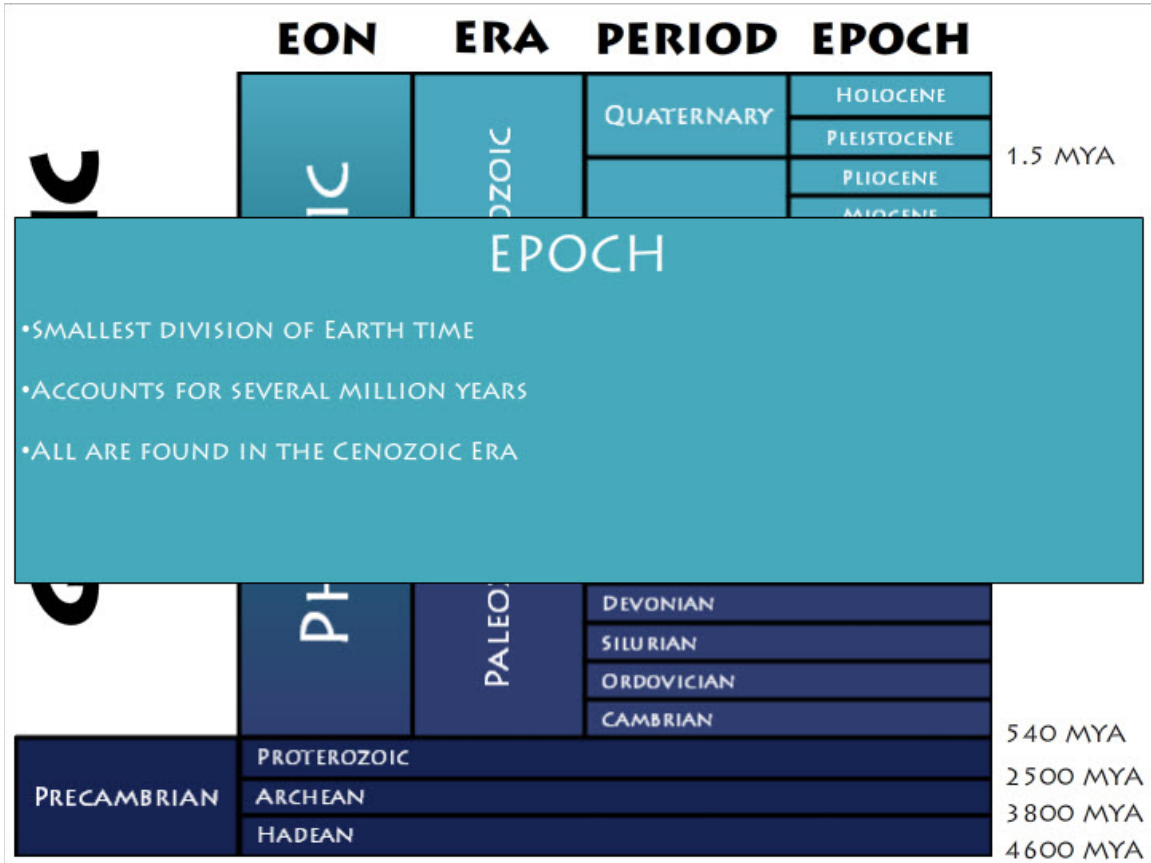
An era is the second longest unit of geologic time. Only the Phanerozoic Eon is subdivided into eras, of which there are only three: the Paleozoic, Mesozoic, and Cenozoic. The three eras of geologic time are named and grouped together based on the type of life that dominated the Earth's surface. Paleozoic comes from the Greek words for "ancient life." Mesozoic means "middle life." Cenozoic stands for "recent life."

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EON		ERA	PERIOD	EPOCH	
C R E A T I O N A L	P R E C A M B R I A N	P R O T E R O Z O I C	P A L E O Z O I C	QUATERNARY	HOLOCENE
					PLEISTOCENE
					PLIOCENE
					MIOCENE
PERIOD					1.5 MYA
<ul style="list-style-type: none"> • THIRD LONGEST UNIT OF GEOLOGIC TIME • SEGMENTS OF TENS OF MILLIONS OF YEARS • CHARACTERIZED BY DIFFERENT GEOLOGIC EVENTS, ENVIRONMENTAL CONDITIONS, AND THE EXISTENCE OF DIFFERENT LIFE FORMS 					
				DEVONIAN	
				SILURIAN	
				ORDOVICIAN	
				CAMBRIAN	540 MYA
				PROTEROZOIC	2500 MYA
				ARCHEAN	3800 MYA
				HADEAN	4600 MYA

Periods are the third longest division of Earth time. Periods represent segments of Earth's history that lasted tens of millions of years. Different geologic events, environmental conditions, and the existence of different life forms characterize the different periods.

Module 9: Earth's History
Topic 3 Content: Geologic Time Divisions Notes



An epoch is the smallest division of Earth time and accounts for several million years. All of the epochs on the geologic time scale are found in the Cenozoic Era. These small divisions can only be made in recent times due to the amount of available data.