

I. Identify the fossils provided for you. Choose from the following:

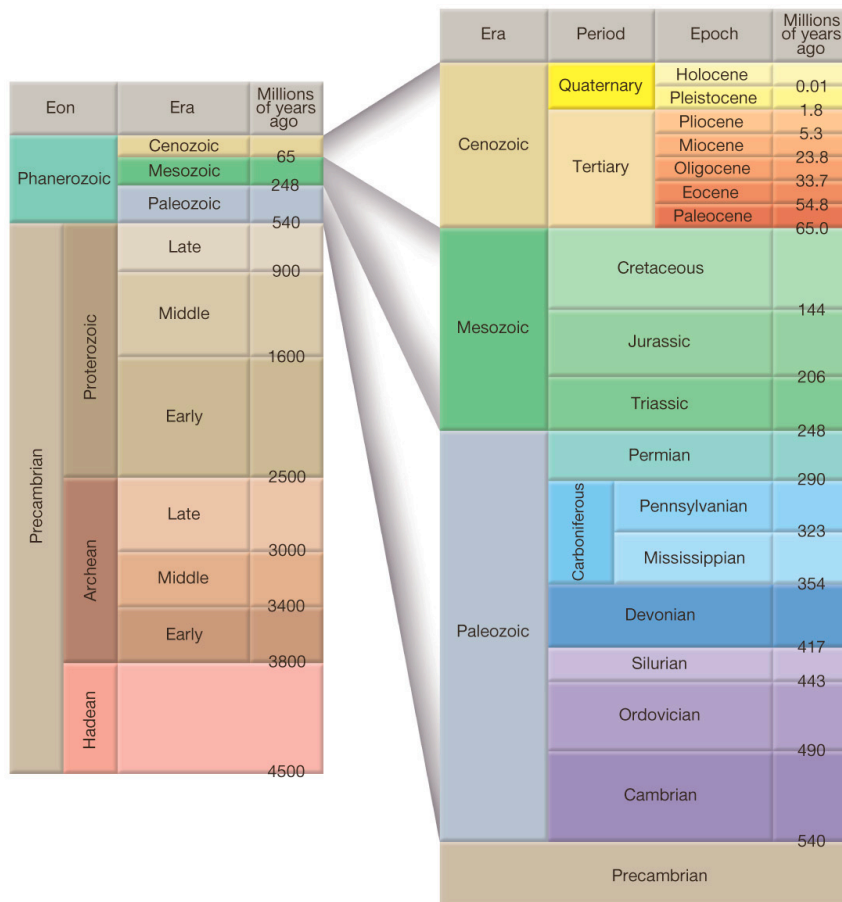
- Stromatolite (algal mat)
- Plant
- Brachiopod
- Bryozoan
- Annelid
- Mollusc, Bivalve
- Mollusc, Gastropod
- Mollusc, Cephalopod
- Cnidaria, Hexacoral
- Cnidaria, Tabulate coral
- Cnidaria, Rugose coral
- Arthropod
- Echinoderm
- Vertebrate (and specify if possible what type – fish, amphibian, reptile, bird, mammal)

IN the second column indicate likely age (Era)

1.		16.	
2.		17.	
3.		18.	
4.		19.	
5.		20.	
6.		21.	
7.		22.	
8.		23.	
9.		24.	
10.		25.	
11.		26.	
12.		27.	
13.		28.	
14.		29.	
15.		30.	

II. In the first space on the table identify the fossil as you did in Part I. In the second space identify the fossil by genus (use the handout provided). Then fill in the age range for fossil.

Fossil ID (see part I)	Genus (see handout)	C	O	S	D	M	P	P	T	J	K	T	Q
1.													
2.													
3.													
4.													
5.													
6.													



III. For this part work as a group.

Construct a geologic time scale that is “to scale”.

Indicate the scale you have used (i.e. - _____ million years = _____)

On your time scale indicate the proper position or time range for the events listed below. Whatever you use, draw it out on a piece of paper or take a Picture.

(NOTE – times are given in millions of years ago (mya). 1000 mya is the same as 1 billion years ago)

- The first life (3500 mya)
- Only prokaryotes (single-celled, non-nucleated organisms) existed (3500- 2000 mya)
- The first eukaryotes (these ones were single celled) (2000 mya)
- The first multicellular organisms (1000 mya)
- The first animals (700 mya)
- The first land plants (Silurian)
- The first land animals (Devonian)
- Trilobites ruled the world (Cambrian)
- The age of fish (time of greatest diversity for this group) (Devonian)
- The age of amphibian (time of greatest diversity for this group) (Pennsylvanian-Permian)
- The age of reptiles (time of greatest diversity for this group) (Mesozoic)
- The age of mammals (time of greatest diversity for this group) (Cenozoic)
- The first amphibians (evolve from fish) (Devonian)
- The first reptiles evolved from amphibians (Pennsylvanian)
- The first mammals evolved from reptiles (Triassic)
- The first birds evolved from reptiles (Jurassic)
- Gymnosperms (naked seed plants) were the dominant plant (Mesozoic)
- Spore bearing plants were the dominant plant (Mississippian to Permian)
- Angiosperms (flowering plants) were the dominant plant (Cenozoic)
- The first angiosperms (Cretaceous)
- The Ice Age (Pleistocene)
- The first Homo Sapiens (Pleistocene)
- Dinosaurs existed (Mesozoic)
- The largest extinction of all times (Permian – Triassic boundary)
- Dinosaurs went extinct (Cretaceous – Tertiary boundary)
- The first “hard parts” (600 mya)
- Free oxygen becomes abundant in the atmosphere (2000 mya)
- The earth forms (4500 mya)
- The supercontinent Pangaea existed (Permian – Triassic)
- The Rocky Mountains formed (Paleocene – Eocene)
- The Wasatch Mountains begin to form (Miocene)
- The Appalachian Mountains formed (Devonian – Permian)
- The U.S. became a nation