

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

# Geologic Timeline Analysis

**Directions:** Begin by filling in the blank boxes on the time scale diagram on the right, using the diagram on p. 354. Then, answer the following questions, referring to your timeline.

- 1) Look at the three major eras shaded on your timeline. What larger time interval do all three of these eras fit into?
- 2) Place the following terms in order from smallest to largest: **period; epoch; eon; era**
- 3) During what three periods did the dinosaurs exist?
- 4) The first three eons (from the beginning of the earth's formation) are all lumped into one general category called \_\_\_\_\_.
- 5) How much time has gone by since the extinction of the dinosaurs?
- 6) If the first dinosaurs existed around 230 million years ago, for about how many years in total did dinosaurs rule the earth?
- 7) The dinosaurs were around for \_\_\_\_\_ times the number of years as hominids have been. (\*HINT: Divide the dinosaurs' existence by that of hominids)
- 8) The Earth has been around for \_\_\_\_\_ times the number of years as modern humans (*Homo sapiens*).
- 9) How much time passed before the first life appeared on earth?
- 10) For what percentage of the earth's existence have hominids existed? (\*HINT: Divide the two numbers and then multiply by 100)

The Geologic Time Scale						
Eon	Era	Period	Epoch	Millions of years ago		
Phanerozoic	[Blank Box]	Quaternary	Holocene	0.01		
			Pleistocene	2.6		
		Neogene	Pliocene	5.3		
			Miocene	23.0		
			Oligocene	33.9		
		Paleogene	Eocene	55.8		
			Paleocene	65.5		
			[Blank Box]	[Blank Box]	145.5	
		[Blank Box]	[Blank Box]	[Blank Box]	[Blank Box]	199.6
					[Blank Box]	251
Triassic	[Blank Box]			299		
	[Blank Box]			318		
Carboniferous	Pennsylvanian			318		
	Mississippian			359		
[Blank Box]	[Blank Box]			Devonian	416	
				Silurian	444	
				Ordovician	488	
				[Blank Box]	542	
Proterozoic	2500					
Archean	~4000					
Hadean				~4600		

# Eras of Geologic Time:

**Directions:** Use all four sections of chapter 13 (p. 364 – 385) to help you record some of the most important events and evolutionary developments of each era.

**Precambrian time:** dates → \_\_\_\_\_

(Please note: Precambrian time is not technically an “era”)

- Meaning: \_\_\_\_\_
- Facts:

**Paleozoic Era:** dates → \_\_\_\_\_

- Meaning: \_\_\_\_\_
- Facts:

**Mesozoic Era:** dates → \_\_\_\_\_

- Meaning: \_\_\_\_\_
- Facts:

**Cenozoic Era:** dates → \_\_\_\_\_

- Meaning: \_\_\_\_\_
- Facts: