Eon	Era	Period		Epoch	
P H A N E R O Z O I C	Cenozoic	Quaternary		Holocene	0 Yr.
				Pleistocene	15K Yr
		Tertiary	Neogene	Pliocene	1.8 Ma
				Miocene	5.3 Ma
			Paleogene	Oligocene	24 Ma
				Eocene	34 Ma
				Paleocene	55 Ma
	Mesozoic	Cretaceous			65 Ma
		Jurassic			142 Ma
		Triassic			202 Ma
	Paleozoic	Permian			251 Ma
		Pennsylvanian	Carboniferous		292 Ma
		Mississippian			320 Ma
		Devonian			354 Ma
		Silurian			417 Ma
		Ordovician			440 Ma
		Cambrian			495 Ma
					545 Ma
	Proterozoic	Pre-Cambrian (general)			2500 Ma
	Archean				4000 Ma
	Hadean				4550 Ma

Name: _____

Fossils Lab:

1) Go through the fossil samples and complete a fossil description box for each individual fossil.
2) Colour coordinate the different periods with the 16 samples by lightly shading or outlining with pencil crayons the fossils information box and the respective period on the geologic timescale. **Careful, some periods have multiple fossils.**
3) You have now created a legend for indexing geologic layers. Use this legend and what you know about physical and structural geology to explain and give timeframes for the geologic cross section on the back.

Fossil Name: _____

Sketch:

Era / Period: _____

Age:

Fossil Name: _____

Sketch:

Era / Period: _____

Age:

Fossil Name: _____

Sketch:

Era / Period: _____

Age:

Fossil Name: _____

Sketch:

Era / Period: _____

Age:

Fossil Name: _____

Sketch:

Era / Period: _____

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Sketch:

Era / Period: _____

Age:

Fossil Name: _____

Sketch:

Era / Period: _____

Age:

Fossil Name: _____

Sketch:

Era / Period: _____

Age:

Fossil Name: _____

Sketch:

Era / Period: _____

Age:

Carcharhinus species

Turritella plebia

Nummulites species

Ammonite

Mucrospirifer species

Composita Species

Aulocystis species

Batostomella jamesi

Streptelasma rusticum

Elrathia kingi

1) Number the layers from 1 (oldest) to 13 (youngest)

2) Place the geologic events (a-h) in the correct relative time sequence in the table below, in order from oldest (1) to youngest (8).

    a. Tilting.
    b. Uplift and erosion (angular unconformity).
    c. Submergence and deposition of sedimentary layers 10-13.
    d. Uplift and erosion to current position.
    e. Submergence and deposition of sedimentary layers 7-9.
    f. Uplift and erosion (disconformity)
    g. Submergence and deposition of sedimentary layers 1-6.
    h. Fault.

Event order:

  ___ ___ ___ ___ ___ ___ ___ ___
   1   2   3   4   5   6   7   8
Oldest   Youngest

3) Place date ranges on layers using the fossils discovered in each layer. If there are no fossils in a layer use the surrounding layers to come up with a date range.

Layer Number	Fossil(s) Name	Age Range of Layer
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		