Name_____ Date_____ Section_____

Earth Science Unit 2 Earth's History

Title: Activity 8 The Geologic Time Scale

Challenge Question: What is the geologic time scale?

Background: *Could a mass extinction take place in the future? Explain.*

_____

_____

_____

Materials:

The Dynamic Earth book

Vocabulary: Define the following terms in your own words.

Term	Definition	Picture or Example
geology		
geologic time scale		

Procedures:

1. Read pages 118 – 127 in the ***Dynamic Earth*** book.
2. Answer questions 1 – 3, 5 – 14, and 16 from the reading.
3. Do Lesson Review on page 129, questions 1 – 9.
4. Create definitions for the Vocabulary. Answer Analysis Questions.

Data/Results: *(Write your responses to the book questions on a separate sheet of paper.)*

Analysis Questions:

1. What do you notice about the different rock layers in the Grand Canyon? Why do you think these differences exist?

_____

_____

_____

_____

_____

2. What defines intervals of time on the geologic time scale? Which is a larger unit of geologic time, an epoch or an era? Why don't we have many fossils from life forms during Precambrian time? Why does more information exist for later geologic time division?

3. How did cyanobacteria affect Earth's atmosphere during the Proterozoic eon?

4. How did Earth's oceans form?

5. What is the "Cambrian Explosion"?

6. What made Pangaea drift toward and away from the South Pole? Is this an example of a process that supports catastrophism or uniformitarianism? Explain.

7. Why is the Phanerozoic eon divided into smaller units of time than the eons in Precambrian time? How did geologists decide on the lengths of the smaller time divisions in the Phanerozoic eon?