Name_____ Date_____ Section_____

Earth Science Unit 2 Earth's History

Title: Activity 5 Geologic Change Over Time

Challenge Question: How do we learn about Earth's history?

Background: *What are fossils? What can scientists learn from fossils?*

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Materials:

The Dynamic Earth book

Vocabulary: Define the following terms in your own words.

Term	Definition	Picture or Example
Uniformitarianism		
fossil		
trace fossil		
climate		
ice core		

Procedures:

1. Read pages 78 – 89 in the ***Dynamic Earth*** book.
2. Answer questions 1 – 3, 5 – 18, and 20 – 22 from the reading.
3. Do Lesson Review on page 91, questions 1 – 11.
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. Scientists think Earth's surface changes today in the same ways it has always changed, and that by applying what they have come to know about these changes, they can accurately determine what Earth was like in the past. What example can you provide of a surface change that occurs on Earth today that has probably happened in the past?

2. Examine the images of the fossils formed in different ways in the book. What methods seem to preserve fossils in a way that provide the most information about the organism?

3. What are two pieces of evidence that help to support the fact that at one time, Earth's continents formed a single landmass? (*Hint: Use the information presented in the maps of the continents and Pangaea to support your response.*)

4. What are three ways that scientists learn about past climate conditions on Earth? What is a limitation of using tree rings to determine past climate conditions?

5. How can ice cores and tree rings reveal conditions and changes in the environment?