Name_____ Date_____ Section_____

Earth Science Unit 2 Earth's History

Title: Activity 7 Absolute Dating

Challenge Question: How is the absolute age of rock measured?

Background: *Draw a picture of a fossil and list 5 things that you know about fossils in the box below.*

Materials:

The Dynamic Earth book

Vocabulary: Define the following terms in your own words.

Term	Definition	Picture or Example
absolute dating		
radioactive decay		
half-life		
radiometric dating		

Procedures:

1. Read pages 106 – 115 in the ***Dynamic Earth*** book.
2. Answer questions 1 – 3, and 5 – 16 from the reading.
3. Do Lesson Review on page 117, questions 1 – 12.
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. Why would radiocarbon dating not be useful for determining the ages of volcanic igneous rocks or rocks collected from the moon?

_____

_____

_____

_____

2. On what types of organism remains is radiocarbon dating useful?

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3. Why can't radiometric dating of Earth rocks be used to determine the age of Earth?

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4. What are the characteristics of an index fossil?

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5. What pattern do you see in the graph? Use the pattern to complete the last bar.

6. The graph shows that as the amount of the old radioactive element _____, the amount of the new stable element _____.