Pre-Activity Worksheet: Historical Thinking

General Description
In the activity you will do this week during your learning/discussion group, you will be examining how biologists learn about events in the past. In order to be prepared for this activity, complete this worksheet.

Reading
Read sections 1.3 (pgs. 8-14) and 22.2 (pgs. 460-463) in your text. Pay particular attention to figures 1.13, 22.11, 22.12, and 22.16.

Definitions
Write a definition of the following words. Use your text, textbook glossary, and your previous knowledge to create the best definition possible. Remember to connect your definitions to exploring historical events.

1) fossils

2) evidence

3) uniformitarianism

4) theory

Questions
Answer the following questions. You will explore your answers to these questions in-depth during learning/discussion group.

1) Describe three ways that biologists examine the past. Which of these strategies is the best? Defend your answer.

2) Name two theories other than the theory of evolution. Are these theories connected to evolutionary theory at all? Why or why not?

3) What are some strategies or lines of evidence that you use to examine your past? Create parallels between these strategies and strategies used to explore the history of life. For example, one might use old photographs to reconstruct a lineage. This strategy could be considered similar to using fossils to trace the evolutionary history of an organism.