

Unit 5 Section 1 Study Guide

Directions: Answer the following questions.

Reviewing Objectives Part 1:

1. Determine the approximate age of a sample, when given the half-life of a radioactive substance (in graph or tabular form) along with the ratio of daughter to parent substances present in the sample. Pages: 193-196
2. Explain why C-14 can be used to date a 40,000 year old tree but U-Pb cannot. Pages: 193-196

Reviewing Major Concepts Part 2: *Chapter 8 section 2*

6. List three methods of radiometric dating, and explain the age range for which they are most effective.

CRITICAL THINKING

7. Demonstrating Reasoned Judgment Suppose you have a shark's tooth that you suspect is about 15,000 years old. Would you use ^{238}U or ^{14}C to date the tooth? Explain your answer.