

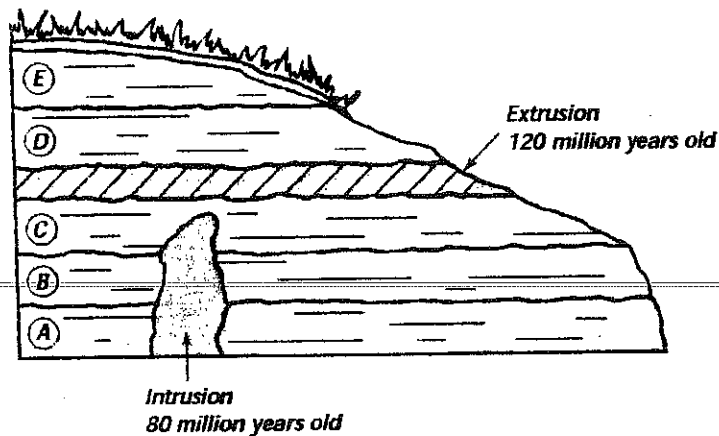
SECTION 4-3

REVIEW AND REINFORCE

Radioactive Dating of Rocks

◆ Understanding Main Ideas

Use the figure below to answer the questions 1–3. Write your answers on a separate sheet of paper.



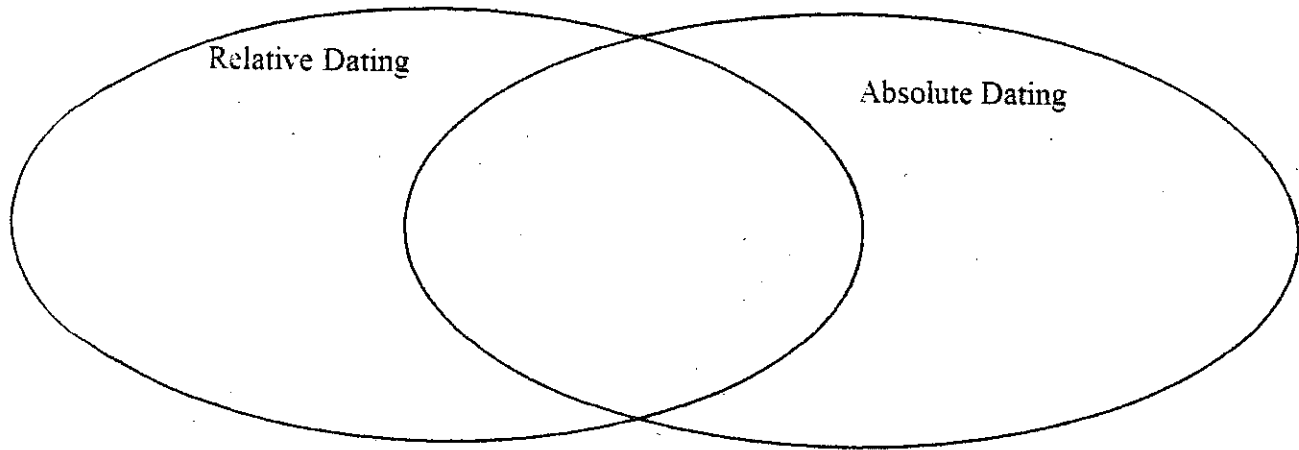
1. Can geologists use radioactive dating to find the absolute ages of sedimentary layers A, B, C, D, and E? Explain why or why not.
2. Can geologists use radioactive dating to find the absolute ages of the extrusion or the intrusion? Explain why or why not.
3. What is the age of rock layer C? Explain how you determined its age.

◆ Building Vocabulary

Fill in the blank to complete each statement.

4. When all the atoms of a particular type of matter are the same, the matter is a(n) _____.
5. The time it takes for half of the atoms in a sample of a radioactive element to decay is called its _____.
6. All matter is made of tiny particles called _____.
7. During _____, the atoms of one element break down to form atoms of another element.

8. Compare and contrast relative and absolute dating.



9. What happens during radioactive decay?

10. What can be learned from radioactive dating?

11. Radioactive dating is typically used on what type of rock?

12. How old is our planet?