

Ch 5 Lesson 2 Review

1) Identify: What do scientists measure when determining the absolute age of a rock? FSAS SC.7.E.6.3

- A) amount of radioactivity
- B) number of uranium atoms
- C) ratio of neutrons and electrons
- D) ratio of parent and daughter isotopes

2) Explain: What are isotopes? FSAS SC.7.E.6.3

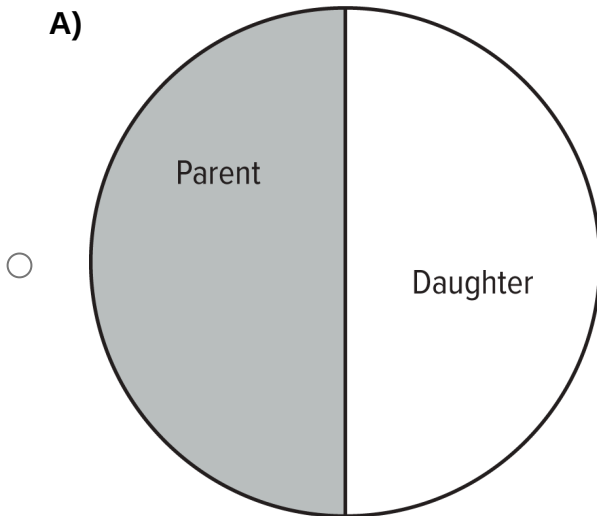
- A) atoms of the same element with different numbers of electrons but the same number of protons
- B) atoms of the same element with different numbers of electrons but the same number of neutrons
- C) atoms of the same element with different numbers of neutrons but the same number of protons
- D) atoms of the same element with equal numbers of neutrons and protons

Ch 5 Lesson 2 Review

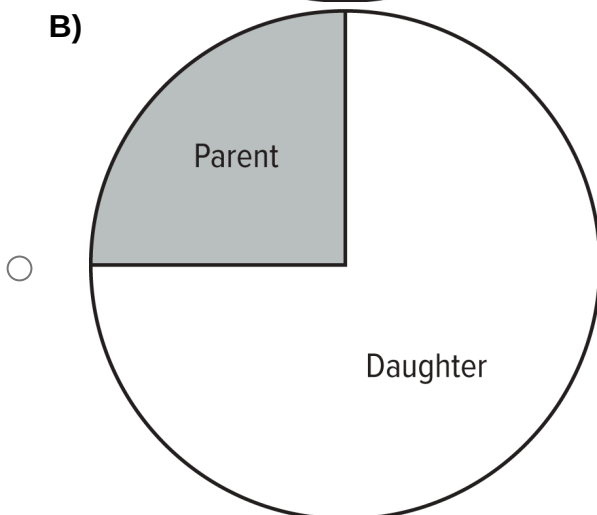
3) Analyze: Which pie chart shows the ratio of parent to daughter atoms after three half-lives? FSAS

SC.7.E.6.3

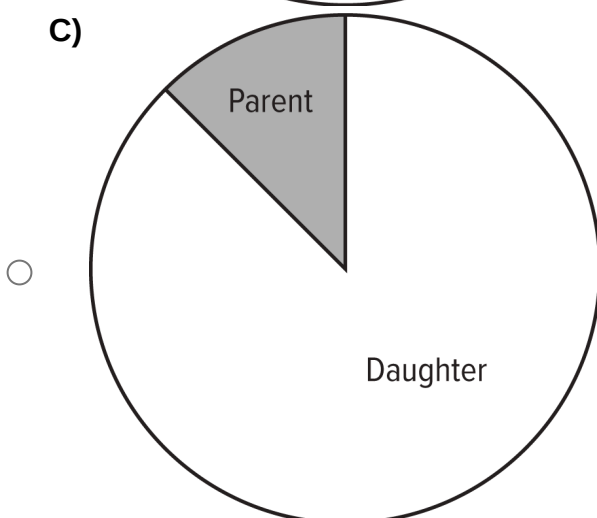
A)



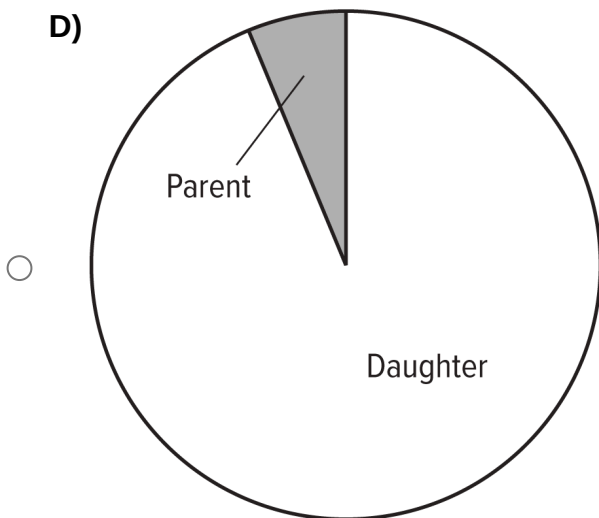
B)



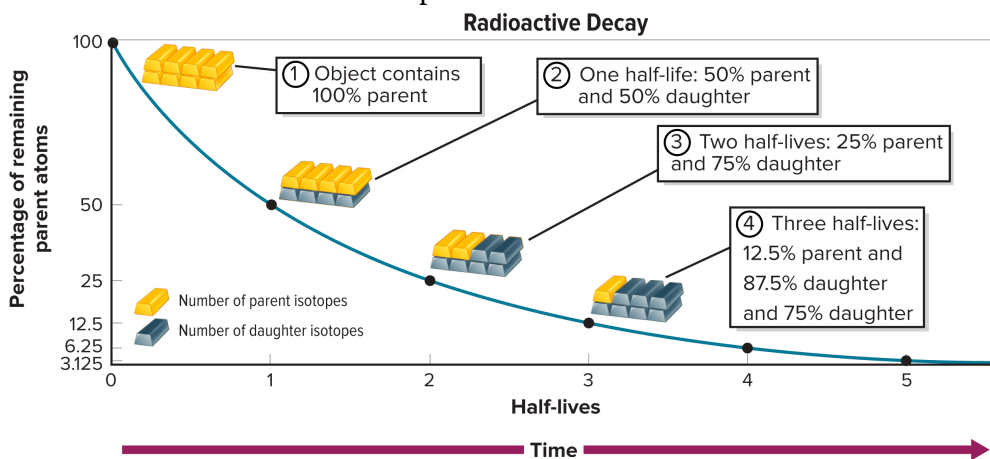
C)



Ch 5 Lesson 2 Review



- 4) What characteristic of radioactive decay makes it useful for determining the absolute age of samples?
- A) occurs at a constant rate
 - B) changes based on temperature
 - C) slows down in very dense samples
 - D) speeds up based on the amount of the sample
- 5) Scientists represent half-life data on graphs. As more time passes, the less material is present. The graph below shows the decay of the isotope thorium – 232 over time. At half life 2 on the graph, where 25% of the parent and 75% of the daughter atoms are left over, 28 million years have elapsed. What is the half-life of this isotope?



- A) 35 billion years
- B) 28 billion years
- C) 14 billion years
- D) 7 billion years