

Chapter 7 & Nuclear Study Guide

Identify the letter of the choice that best completes the statement or answers the question

- ____ 1. Carbon is able to bond with other elements in many different ways because it has
 - a) graphite
 - b) organic
 - c) four valence electrons
 - d) determine the age of rocks and fossils
 - e) isotopes
 - f) the nucleus splits apart
 - g) penetrate and damage cells
 - h) power plants and bombs
 - i) down by 4
 - j) for centuries
 - k) helium
 - l) four
 - m) diamond
- ____ 2. How many chemical bonds can each carbon atom form?
- ____ 3. Which form of pure carbon is so hard that it can be used in cutting tools?
- ____ 4. Which form of pure carbon is formed of layers that slide past each other?
- ____ 5. Compounds that contain the element carbon are called
- ____ 6. When a large unstable atoms like uranium-235 is bombarded with atomic particles
- ____ 7. Nuclear fission reactions are used for
- ____ 8. Nuclear waste (the left over uranium) must be stored
- ____ 9. Radioactive decay happens when atomic nuclei of unstable _____ release fast moving particles and energy.
- ____ 10. An Alpha particle is 2 protons and 2 neutrons, like a
- ____ 11. During Alpha decay atomic mass goes
- ____ 12. Beta decay is a danger to humans because the particles can
- ____ 13. Half-Life is used to