Chapter7 & 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

____ 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

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