

NUCLEAR CHEMISTRY Vocabulary Review

Match the correct vocabulary term to each numbered statement. Write the letter of the correct term on the line.

Column A

- _____ 1. time required for one half of the nuclei of a radioisotope sample to decay to products
- _____ 2. elements in the periodic table with atomic numbers above 92
- _____ 3. conversion of an atom of one element to an atom of another element
- _____ 4. isotopes that have unstable nuclei and undergo radioactive decay
- _____ 5. high-energy photon with no mass or electrical charge
- _____ 6. fast-moving electrons released by a radioactive nucleus
- _____ 7. the splitting of an atomic nucleus into smaller fragments
- _____ 8. gas-filled metal tube used to detect the presence of radiation
- _____ 9. positively charged particle consisting of two protons and two neutrons
- _____ 10. penetrating rays and particles emitted by a radioactive source
- _____ 11. device that uses a coated phosphor surface to detect ionizing radiation
- _____ 12. reaction in which two light nuclei combine to form a nucleus of greater mass

Column B

- a. radioisotopes
- b. half-life
- c. Geiger counter
- d. beta particles
- e. fission
- f. radiation
- g. transmutation
- h. scintillation counter
- i. gamma ray
- j. fusion
- k. alpha particles
- l. transuranium elements