

PSC 1341
Quiz 5

Matching

1. Curie _____
2. RAD (radiation absorbed dose) _____
3. REM _____
4. Beta decay _____
5. Gamma decay _____
6. Half Life _____
7. Bicarbonate _____
8. ionic bond _____
9. Phosphate _____

- A. HCO_3^-
- B. PO_4^{3-}
- C. A nuclear decay that occurs generally when the nucleus has too many protons
- D. A nuclear decay that occurs generally when the nucleus has excess energy
- E. Takes into account the disintegrations, the absorbing material and also the relative biological effect
- F. measures radiation but also takes into account the absorbing material
- G. A measure of radiation that is proportional to the number of disintegrations per second
- H. the time it takes for one half of a radioactive sample to decay.
- I. a bond formed typically between a metal and a non-metal

- ___ 10. An electron is emitted by an atomic nucleus in the process of
- a) alpha decay
 - b) beta decay
 - c) gamma decay
 - d) nuclear fission

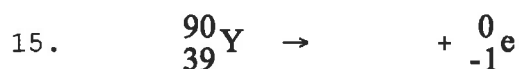
- ___ 11. What is the symbol used to describe a Beta particle in nuclear reactions?
- (A) ${}^4_2\text{He}$ (B) ${}^0_{+1}\text{e}$ (C) ${}^0_{-1}\text{e}$ (D) γ (E) ρ

- ___ 12. What is the symbol used to describe an alpha particle in nuclear reactions?
- (A) ${}^4_2\text{He}$ (B) ${}^0_{+1}\text{e}$ (C) ${}^0_{-1}\text{e}$ (D) γ (E) Λ

13. Which type of radiation does the most biological damage?
(A) alpha (B) beta (C) gamma

14. Which of the following is not a metal?
(A) calcium (B) lithium (C) oxygen (D) lead

Complete the following nuclear reactions.



17. What is the chemical formula for aluminum oxide?

18. What is the chemical formula copper (II) hydroxide?

19. What is the name of the compound with the chemical formula FeCl_2 ?

20. What is the name of the compound with the chemical formula Na_2CO_3 ?
