LESSON 17

NUCLEAR CHANGES

I. Nuclear Reaction Equations

A. Reactant: Nucleus _____ the decay

B. Products: Nucleus _____ the decay plus the _____ emitted

II. Nuclear Reaction Equation Examples

A. Show the alpha decay of Uranium-238.

B. Show the beta and gamma decay of Technetium-99.

C. Show the neutron emission of Beryllium-13.

D. Radium-226 goes through alpha decay and has a half-life of 1,600 years. What are the products of this decay, and how long will it take for only 1.6% of an ingested sample to remain in someone's body?

1. The products are _____ and _____
2. Half-lives for Radium-226

Half-life	Percent remaining	Total time elapsed
1st	50%	
2nd	25%	
3rd	12.5%	
4th	6.3%	
5th	3.2%	
6th	1.6%	