Writing Nuclear Reactions!

1) Describe what happens to a nucleus during radioactive decay.

2) Fill in the following chart for the three types of decay:

Characteristics of Alpha, Beta, and Gamma Radiation					
Property	Alpha	Beta	Gamma		
What is it?					
Symbol					
Charge					
What stops it?					

- 3) Which type of radiation is a packet of energy (photon) and not a particle?
- 4) What type of radiation is a helium nucleus?
- 5) Which type of radiation is a super fast moving electron?
- 6) Which type of decay results in an increase in the atomic number for the decay product?
- 7) Which type of decay results in a decrease in the atomic number for the decay product?
- 8) Which type of decay results in no change for the decay product?

Complete the following e	juations and fill in the blanks.	Type of Decay

²³⁵ 92	\rightarrow	₉₀ Th	+	
¹⁴ ₆ C	\rightarrow	14 7 N	+	
227 89 AC	\rightarrow	²²³ ₈₇ Fr	+	
²¹⁴ 83 Bi	\rightarrow	² ^₄ He	+	
²¹² 83 Bi	\rightarrow	0 ₋₁ e	+	





(decay)

(alpha decay)

(alpha decay)

(beta decay)

(_____ decay)

(beta decay)