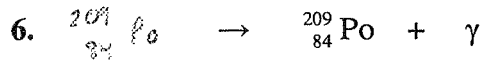
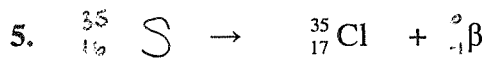
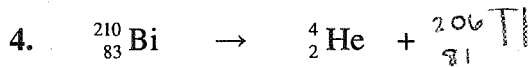
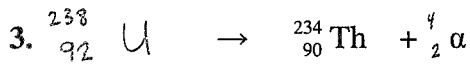
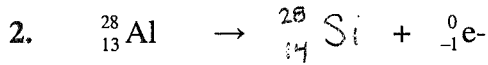
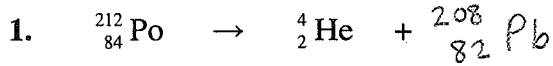


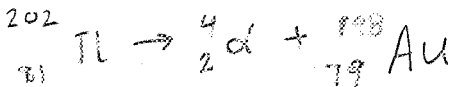
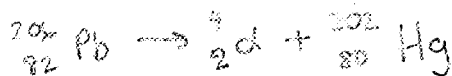
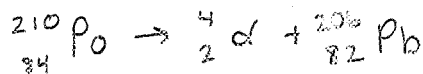
Name: Key

Simple Nuclear Equations and Isotope Practice

Complete the following equations



7. Write the nuclear equations for the decay of Po-210 if it undergoes 2 consecutive alpha decays followed by a beta decay followed by another alpha decay.



8. Titanium has five common isotopes: ${}^{46}\text{Ti}$ (8.0%), ${}^{47}\text{Ti}$ (7.8%), ${}^{48}\text{Ti}$ (73.4%), ${}^{49}\text{Ti}$ (5.5%), and ${}^{50}\text{Ti}$ (5.3%).

a. What is the average atomic mass of Ti? Show your work.

$$\begin{aligned} 46(0.08) &= \\ 47(0.078) &= \\ 48(0.734) &= \\ 49(0.055) &= \\ 50(0.053) &= \end{aligned} \quad 47.92 \text{ amu}$$

48 amu

b. Which isotope of Ti is most abundant? ${}^{48}\text{Ti}$

c. Which isotope of Ti is least abundant? ${}^{50}\text{Ti}$