

1.  ${}^3_1H \rightarrow {}^3_2He + {}^0_{-1}e$   $\beta^-$  decay
2.  ${}^{232}_{92}U \rightarrow {}^{228}_{90}Th + {}^4_2He$   $\alpha$  decay
3.  ${}^{144}_{58}Ce \rightarrow {}^{144}_{59}Pr + {}^0_{-1}e$   $\beta^-$  decay
4.  ${}^{65}_{30}Zn \rightarrow {}^{65}_{29}Cu + {}^0_{+1}e$   $\beta^+$  decay
5.  ${}^{40}_{19}K \rightarrow {}^{40}_{18}Ar + {}^0_{+1}e$   $\beta^+$  decay
6.  ${}^7_4Be \rightarrow {}^7_4Be + \gamma$   $\gamma$  decay
7.  ${}^1_0n + {}^{235}_{92}U \rightarrow {}^{236}_{92}U \rightarrow {}^{141}_{55}Cs + {}^{92}_{37}Rb + 3{}^1_0n$  Fission
8.  ${}^{222}_{86}Rn \rightarrow {}^{218}_{84}Po + {}^4_2He$   $\alpha$  decay
9.  ${}^{129}_{53}I \rightarrow {}^{129}_{54}Xe + {}^0_{-1}e$   $\beta^-$  decay
10.  ${}^{239}_{94}Pu \rightarrow {}^{235}_{92}U + {}^4_2He$   $\alpha$  decay
11.  ${}^{15}_8O \rightarrow {}^{15}_7N + {}^0_{+1}e$   $\beta^+$  decay
12.
  - a.  ${}^{234}_{90}Th \rightarrow {}^{230}_{88}Ra + {}^4_2He$
  - b.  ${}^{59}_{26}Fe \rightarrow {}^{59}_{27}Co + {}^0_{-1}e$
  - c.  ${}^{99}_{43}Tc \rightarrow {}^{99}_{43}Tc + \gamma$
  - d.  ${}^{11}_6C + {}^0_{-1}e \rightarrow {}^{11}_5B$
13.  ${}^1_1H + {}^7_3Li \rightarrow 2{}^4_2He$  or  ${}^8_4Be$
14.  ${}^7_4Be + {}^1_0n \rightarrow 2{}^2_1H + {}^4_2He$  or  ${}^1_1H + {}^3_1H + {}^4_2He$
15.  ${}^{246}_{96}Cm + {}^{12}_6C \rightarrow {}^{254}_{102}No + 4{}^1_0n$
16.  ${}^{250}_{98}Cf + {}^{10}_5B \rightarrow {}^{258}_{103}Lr + 2{}^1_0n$