Name

Period____

Balancing Decay Equations Practice

Balance the following equations by placing the appropriate species on the lines.

1)
$${}^{7}_{3}\text{Li} \rightarrow {}^{4}_{2}\text{He} + _{---}$$

14)
$$^{177}_{79}$$
Au \rightarrow _____ + $^{173}_{77}$ Ir

2)
$$^{108}_{53}I \rightarrow _{----} + ^{104}_{51}Sb$$

15)
$$\longrightarrow {}_{2}^{4}\text{He} + {}_{82}^{206}\text{Pb}$$

3)
$$\longrightarrow_{-1}^{0} e + {}^{10}_{5} B$$

16)
$${}^{14}_{6}C \rightarrow {}^{0}_{-1}e + \underline{\hspace{1cm}}$$

4)
$$^{154}_{66}$$
Dy $\rightarrow {}^{4}_{2}$ He + _____

17)
$$^{137}_{55}$$
Cs \rightarrow _____ + $^{137}_{56}$ Ba

5)
$${}^{131}_{53}I \rightarrow \underline{\hspace{1cm}} + {}^{131}_{54}Xe$$

18)
$$\longrightarrow_{-1}^{0} e + \frac{181}{73} Ta$$

6)
$$\longrightarrow {}_{2}^{4}\text{He} + {}_{70}^{152}\text{Yb}$$

19)
$$^{261}_{106}$$
Sg $\rightarrow {}^{4}_{2}$ He + _____

7)
$${}^{2}_{1}H \rightarrow {}^{0}_{-1}e + \underline{\hspace{1cm}}$$

20)
$$^{256}_{109}\text{Mt} \rightarrow ___ + ^{252}_{107}\text{Bh}$$

8)
$${}^{7}_{3}\text{Li} \rightarrow \underline{\hspace{1cm}} + {}^{7}_{4}\text{Be}$$

21)
$$\longrightarrow_{-1}^{0} e + {}^{89}_{39}Y$$

9)
$$\longrightarrow {}_{2}^{4}\text{He} + {}_{72}^{154}\text{Hf}$$

22)
$${}^{238}_{92}\text{U} \rightarrow {}^{4}_{2}\text{He} + \underline{\hspace{1cm}}$$

10)
$$^{166}_{78}$$
Pt $\rightarrow {}^{4}_{2}$ He + _____

23)
$${}^{237}_{93}\text{Np} \rightarrow \underline{\hspace{1cm}} + {}^{233}_{91}\text{Pa}$$

11)
$${}^{15}_{6}C \rightarrow \underline{\hspace{1cm}} + {}^{15}_{7}N$$

24)
$$\longrightarrow {}^{4}_{2}\text{He} + {}^{237}_{93}\text{Np}$$

12)
$$\longrightarrow {}^{0}_{-1}e + {}^{100}_{41}Nb$$

25)
$${}_{0}^{1}n + {}_{92}^{238}U \rightarrow \underline{\hspace{1cm}}$$

13)
$${}^{121}_{50}\text{Sn} \rightarrow {}^{0}_{-1}\text{e} + \underline{\hspace{1cm}}$$

26)
$$----+ {}^{59}_{27}\text{Co} \rightarrow {}^{60}_{27}\text{Co}$$