Nuclear Equations White Board Challenge!

Work with your group to solve nuclear equations. Of course there will be prizes!

$$1)_{103}^{256} Lr \rightarrow_2^4 He + {}_Z^A X$$

2) $_{Z}^{247}Am \rightarrow_{-1}^{0} e + _{Z}^{A}X$

 $3)_{Z}^{A}X \rightarrow {}^{211}_{87}Fr + {}^{4}_{2}He$

4) $_{93}^{175}Np \rightarrow _{2}^{4}He + _{Z}^{A}X$

5)
$$_{2}^{6}He \rightarrow_{-1}^{0} e + _{Z}^{A}X$$

6)
$$_{5}^{13}B \rightarrow_{-1}^{0} e + _{Z}^{A}X$$

7) $_{79}^{211}Au \rightarrow_{-1}^{0} e + _{Z}^{A}X$

8)
$$_{67}^{151}Ho \rightarrow_{2}^{4} He + _{Z}^{A}X$$

9)
$$_{Z}^{A}X +_{-1}^{0} e \rightarrow _{Z}^{213}Po$$

$$10)_{57}^{148}La \rightarrow_{2}^{4} He + {}_{Z}^{A}X$$

11) Decay of polonium-218 by alpha emission

12) Decay of carbon-14 by beta emission.

13) The alpha decay of radon-198

14) The beta decay of uranium-237