Nuclear Equations Name ……

Write nuclear equations that describe the following processes:

$^{231}_{91}$Pa decays by alpha emission to Ac.

$^{222}_{87}$Fr decays by beta emission to Ra.

^{221}Fr decays by alpha emission to At and emits a gamma ray.

^{210}At decays by alpha emission to Bi.

^{133}Xe decays by beta emission to Cs and emits two gamma rays.

More Nuclear Equations – Periodic Table Needed

1. Uranium-235 undergoes an alpha decay to produce thorium-231.

2. Lanthanum -144 becomes cerium-144 when it undergoes a beta decay.

3. Neptunium-233 is formed when americium-237 undergoes a nuclear decay process.

4. When protactinium-229 undergoes alpha decay, an isotope of actinium is formed.

5. Uranium-238 undergoes an alpha decay, producing a thorium isotope and two gamma rays.

6. (Ext) Neon-22 is formed when an element undergoes beta decay.

7. (Ext) Samarium-146 is produced when an element undergoes an alpha decay.

8. (Ext) The beta decay of dysprosium-165 creates a new element.