Please show all work to receive any credit

- 1. For each of the following radioactive atoms or ions; 1) Identify the number of neutrons, protons and electrons, and 2) Write an equation for the expected mode of radioactive decay and clearly support your reasoning.
 - a. ¹³¹I⁻
- 1) Number of protons, electrons, and neutrons
- 2) Equation for expected mode of radioactive decay; clearly explain why this occurs.

b. ${}^{57}Co^{2+}$

- 1) Number of protons, electrons, and neutrons
- 2) Equation for expected mode of radioactive decay; clearly explain why this occurs.

c. ²³⁹Pu

- 1) Number of protons, electrons, and neutrons
- 2) Equation for expected mode of radioactive decay; clearly explain why this occurs.