**Nuclear Decay**

The following atoms all undergo alpha particle emission. Write the complete nuclear equation.

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

The following atoms all undergo beta decay. Write the complete nuclear equation.

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

The following all undergo electron capture. Write the complete nuclear equation.

 + \_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_

 + \_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_

 + \_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_

 + \_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_

The following all undergo positron emission. Write the complete nuclear equation.

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_

Complete the missing information in the reactions. Then, label the reaction one of the following:

* Alpha Decay
* Beta Decay
* Electron Capture
* Positron Emission

\_\_\_\_\_\_ →  +  Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 →  + \_\_\_\_\_ Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 →  + \_\_\_\_\_\_ Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 → \_\_\_\_\_\_\_ +  Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 + \_\_\_\_\_\_ →  Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_ →  +  Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 →  + \_\_\_\_\_\_\_ Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_