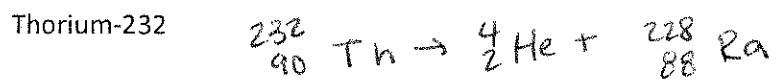
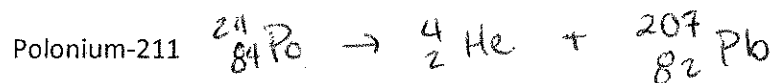
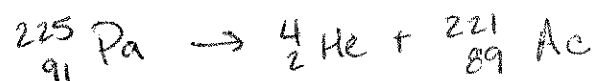


Station 1— α decay

The following radioisotopes undergo alpha decay. Write the equations:



Bismuth-214.

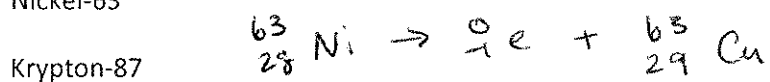


Station 2— β decay

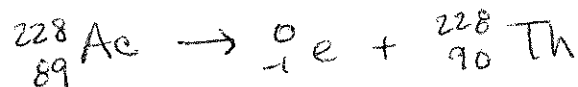
Write the equation for the beta decay of:



Nickel-63



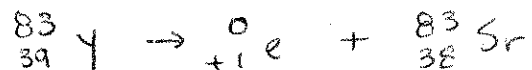
Actinium-228



Station 3— β^+ emission (positron)

Write the equation for the positron emission of:

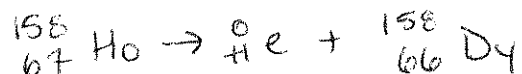
Yttrium-83



Boron-8



Holmium-158

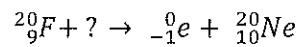
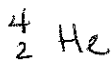
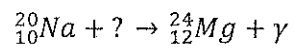
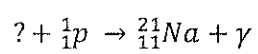


Titanium-43



Station 4— γ decay

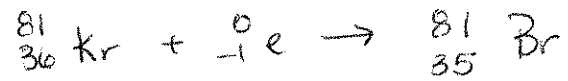
Complete the equations for the following:



Station 5—Electron capture

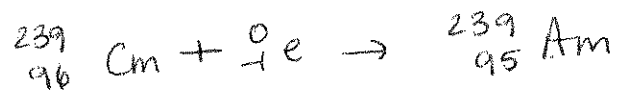
Write the equation for the electron capture of:

Krypton-81

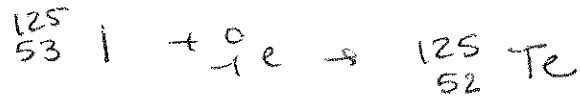
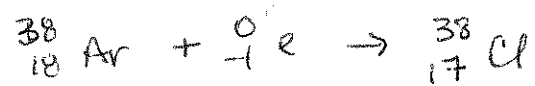


Curium-239

Argon-~~18~~³⁸

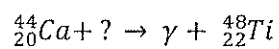
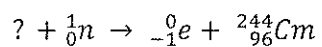
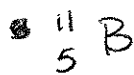
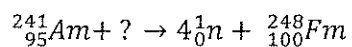
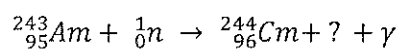


Iodine-~~53~~¹²⁵



Station 6—Transmutation reactions

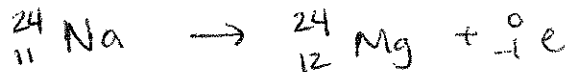
Complete the following equations:



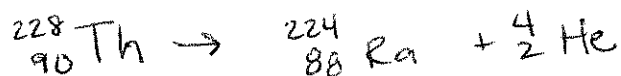
Station 7—More equation writing!

Determine the particle emitted and write the balanced equation for the transmutation of:

Sodium-24 to magnesium-24



Thorium-228 to radium-224



Phosphorus-29 to silicon-29



Scandium-43 to calcium-42

