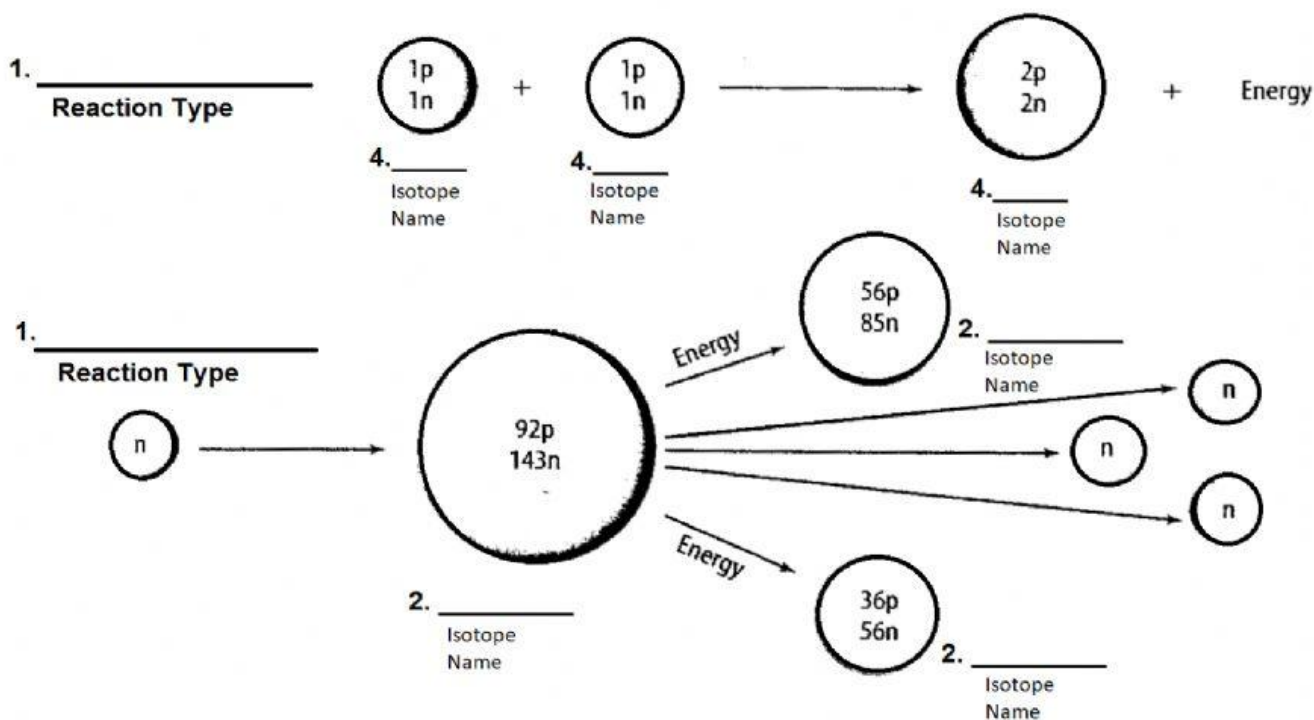


Nuclear Reactions

For each element in the two reactions below, indicate the isotope name in the format, **element symbol - mass**.
Ex: If the element in the reaction was **carbon-14** you would answer **C-14**.



- Select the letter of the equation that correctly explains the nuclear reaction shown in the top diagram.
 - $\text{H-2} + \text{H-2} \rightarrow \text{H-4}$
 - $\text{H-2} + \text{H-2} \rightarrow \text{He-4}$
 - $\text{H-1} + \text{H-1} \rightarrow \text{H-2}$
 - $\text{H-1} + \text{H-1} \rightarrow \text{He-2}$
- Select the letter of the equation that correctly explains the nuclear reaction shown in the bottom diagram.
 - 1 neutron + U-235 $\rightarrow$ Ba-141 + Kr-92 + 3 neutrons + energy
 - 1 neutron + U-238 $\rightarrow$ Ba-141 + Kr-92 + 4 neutrons
 - Ba-141 + Kr-92 $\rightarrow$ U-235 + 3 neutrons
 - Ba-141 + Kr-92 $\rightarrow$ U-238