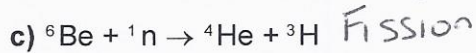
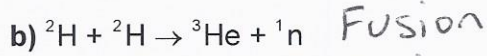
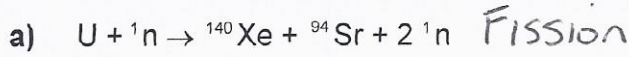
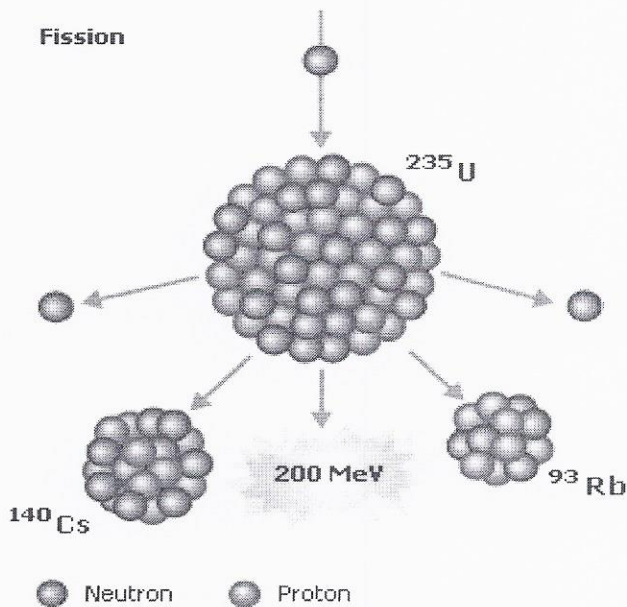


## Nuclear transformation Worksheet

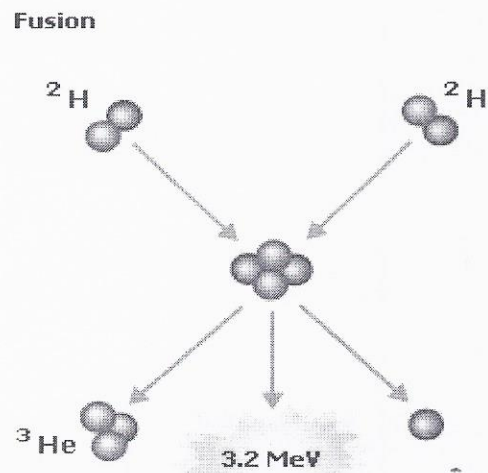
1. Does each of the following nuclear reactions involve fusion or fission?



2. Under each illustration, explain what is occurring.



*Fission: Radioactive element being hit by a  $n^0$  + forming 2 lighter elements*



*Fusion: 2 lighter elements colliding + forming 1 heavier element.*



Looking at the above fission reaction, why does cesium produced with rubidium?

*Proton #  $55 + 37 = 92$   
Uranium has  $92 p^+$*



Why does helium need to be the element produced during the reaction?

*$1Hp^+ + 1Hp^+ = 2p^+$  + He has  $2p^+$*