

Ch 28 HW: Sec Rev 8,9,26bc,27bc,31,47abd,48acd
 Sec 28.2A

obj: Write transmutation reactions.

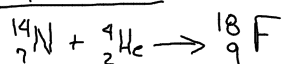
Transmutation Rxns

- A transmutation is the conversion of an atom of one element into an atom of another element.
- * A well defined nuclear change.
- Transmutation Rxns occur during radioactive decay.
- Transmutation Rxns can also occur when a nucleus is bombarded with a subatomic particle.

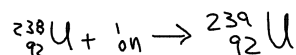
- Particles
 Alpha Particle ${}^4_2\text{He}$
 Proton ${}^1_1\text{H}$
 Neutron ${}^1_0\text{n}$

- The nucleus will change in mass number, atomic number or both.

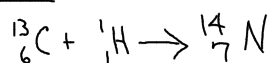
Alpha Particle



Neutron



Proton



Radioactive Decay + Transmutation

- Releases Alpha or Beta Particles.

