

<b>Term</b>	<b>Definition</b>
Alpha particle	A helium nucleus; contains 2 protons and 2 neutrons; has a mass of 4 amu and a charge of +2
Artificial transmutation	occur in stable atoms; need some kind of high energy particles to begin reaction & bombard nucleus
Beta particle	an electron; has a mass of 0 and a charge of -1
Fission	SPLITTING of the nucleus of an atom; LARGER PARTICLE(S) SPLIT into smaller particles
Fusion	LIGHTER NUCLEI are COMBINED to produce heavier nucleus or nuclei
Gamma radiation	Electromagnetic radiation; Similar to xrays; 0 amu; Very dangerous (highly penetrating)
Half-life	the amount of time required for a quantity to fall to half its value as measured at the beginning of the time period
Radioactive tracer	a chemical compound in which one or more atoms have been replaced by a radioisotope
Radioisotope	an UNSTABLE or RADIOACTIVE ISOTOPE of any element
Transmutation	the changing of a nucleus of one element into the nucleus of another element