1. I know how to use the atomic number and mass number to define an isotope and how to show the different isotopes for an element by using standard atomic notation

238

Uranium – 238 : U

92

1. I know the what the following radioactive decay types are and their relative penetrating abilities:
   1. Alpha
   2. Beta
   3. Gamma
2. I know the symbols for the following subatomic particles:
   1. Proton
   2. Neutron
   3. Electron
   4. Alpha particle
   5. Beta particle
3. I know how to recognize and complete balanced equations for the following decay:
   1. Alpha
   2. Beta
   3. Gamma
4. I can explain uses of radioactive decay with reference to half-life
5. I can determine half-life times and amounts for parent(starting) nucleus and daughter(decay) nucleus from half-life graphs
6. I can determine half-life times and amounts for parent(starting) nucleus and daughter(decay) nucleus from word equations, by setting up a table
7. I know the difference between fission and fusion, including which one produces more energy
8. I can complete the balanced nuclear equations for fission and fusion

RADIOACTIVITY VOCABULARY

* Alpha particle
* Atomic number
* Atoms
* Beta particle
* Conservation of mass
* Electron
* Fission
* Fusion
* Gamma radiation
* Half-life
* Isotope
* Light
* Mass number
* Neutron
* Proton
* Radioactive decay