## College Prep Chemistry of the Earth System

Assignment 3D Isotopes and Atomic Mass 30 Points

Answer the following questions

- 1. Why are p<sup>+</sup> and n<sup>o</sup> the only particles that contribute to the mass of an atom?
- 2. What is the difference between atomic mass and mass number?
- 3. Why is the mass of an atom given in atomic mass units (amu) over the actual mass in grams (g)?

For the following isotopes, determine the number of protons, neutrons, and electrons, along with the atomic mass (*in amu*)

- 4. Aluminum-27 (Al)
- 5. Iron-56 (Fe)
- 6. Yttrium-91 (Y)
- 7. Selenium-80 (Se)
- 8. Tungsten-183 (W)