**SI Worksheet 1**

1. What is Avogadro’s Number?
2. Define moles in your own words.
3. Consider Iodine: 127I. How many protons does it have? Electrons? Neutrons? What’s the mass number and atomic number? How much does one mole of Iodine weigh in grams? What about two moles? How many atoms are in two moles of iodine?
4. 100g of KCl is how many moles of KCl? What about the amount of atoms?
5. 357 grams of H2O is how many Liters of water? (hint\* 1 gram= 1mL)
6. Chlorine has two naturally occurring isotopes 35Cl and 37Cl, what is the % abundance of each isotope of chlorine? Which isotope is more commonly encountered? (hint\* look at periodic table)
7. What group of the periodic table do these elements belong to? Li, Na, Mg, Cd, Fe, F, Cl, He, Ne, Ca, Ur, and Yb:
8. What kind of bond forms between a metal and a nonmetal? What about between two nonmetals?
9. Consider: a.25 12X b. 25 12Y c. 26 12X d. 25X+

What are some of the relationships between A-B? A-C? B-C? A-D? C-D?