**Key Vocabulary: Week 3.5: Chemical Bonding and Formulas**

***Complete ALL Week 3.0 and 3.5 flashcards and study over the weekend.***

***Week 3.5- Flashcards on Wednesday, Quiz on Wednesday, 7/3.***

1. **Law of Definite Proportions:** states that atoms in compounds combine in specific ratios. For example. H2O contains hydrogen and oxygen atoms bonded in a 2 to 1 (2:1) ratio.
2. **Diatomic:** Elements that exist naturally bonded to themselves in pairs. Ex. O2, H2, F2
3. **IUPAC:** International Union of Pure and Applied Chemistry. Created most of the rules for chemical naming used today.
4. **Acid:** Compounds capable of giving an H+ ion. Usually have an "H" at the front of the formula. Ex. HF, HCl, HBr, H2SO4
5. **Base:** Compounds that take H+ ions, many contain hydroxide ion (OH-) Ex. NaOH, LiOH
6. **Oxidation Number:** Predicted charges of atoms within compounds.
7. **Representative Particles:** the simplest part of a substance that can represent all of that substance. Molecules of H2O are representative of water.
8. **Monatomic Ion:** A single charged atom. Ex. N3-
9. **Cations:** Positively-charged atoms or molecules.
10. **Anions:** Negatively-charged atoms or molecules.
11. **C2H3O21- :** Acetate
12. **CN1- :** Cyanide
13. **ClO31- :** Chlorate
14. **MnO41- :** Permanganate
15. **ClO2 1- :** Chlorite
16. **ClO41- :** Perchlorate