

CHAPTER 7 – Part 1

THINGS TO KNOW

- ☐ From chapter 7
 - All the vocabulary and notes from the sections we've covered in chapter 7
 - Memorize polyatomic ions (*the list is under the Worksheet tab on the class website*)
 - Memorize the charge/ oxidation number for groups 1, 2, and 13 - 17
 - Memorize the formulas and names for the binary acids and oxyacids (*Worksheet tab on the class website*)
 - Memorize numerical prefixes
 - Memorize names and formulas for common substances (*Worksheet tab on class website*)
 - Memorize the rules for determining oxidation numbers
- ☐ From **Chapter 3**
 - Relative mass
 - Average atomic mass
 - Memorize Avogadro's number: 6.022×10^{23}

THINGS TO KNOW HOW TO DO

- ☐ Write formulas for ionic compounds and name them using the Stock system
- ☐ Write formulas for binary molecular compounds and name using BOTH the Stock system and the prefix system
- ☐ Read a chemical formula
 - $6\text{Al}_2(\text{SO}_4)_3$ contain how many atoms or moles of Al? S? O?
- ☐ Determine oxidation numbers for each of the elements in a compound
- ☐ Determine oxidation numbers for each of the elements in a polyatomic ion
- ☐ Use the periodic table to determine the average atomic mass of an element
- ☐ Calculate formula mass and molar mass of atoms
- ☐ Convert moles to mass and mass to moles using the Q formula (mass \rightarrow moles **or** moles \rightarrow mass)
 - Conversion factor is molar mass and you get it off the periodic table
- ☐ Convert moles to atoms/molecules and atoms/molecules to moles using the Q formula (moles \rightarrow atoms/molecules **or** atoms/molecules \rightarrow moles)
 - Conversion factor is 6.022×10^{23} atoms/molecules in one mole
- ☐ Convert mass to atoms/molecules and atoms/molecules to mass using the Q formula (mass \rightarrow moles \rightarrow atoms/molecules **or** atoms/molecules \rightarrow moles \rightarrow mass)
 - Two conversion factors – molar mass and 6.022×10^{23} atoms/molecules in one mole

THINGS YOU KNOW YOU NEED TO PRACTICE

- ☐
- ☐
- ☐
- ☐