**Unit 9 Notes**

**Neutralization and Titration**

Neutralization reaction – An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reaction, results in a neutral solutions (pH = 7)

Titration – process used during a lab during a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reaction. Uses a solution with a known concentration to calculate the unknown concentration of another solution.

Equivalence point – point at which \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, also the point where the titration process is finished.





Buffered Solution – A solution that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ change in pH when either an acid or base is added.

**Neutralization/Titration calculations:**

Formula is the same for dilutions: M1V1 =M2V2

Examples:

Determine the volume of a 0.100M NaOH needed to titrate 50.0 mL of 0.200M HNO3:

Calculate the concentration of 50.0 mL of HCl if it takes 75.0 mL of 0.150 M KOH to reach the equivalence point: