

WKS
Acid-Base Titrations

Name _____
Period _____ Date _____

- 1) What kind of a reaction is occurring during the titration of an acid and base?
- 2) What are the products of an acid-base titration?
- 3) Write *balanced* neutralization equations for the following acid-base titrations:
 - a) HNO_3 (nitric acid) and CsOH (cesium hydroxide)
 - b) HBr (hydrobromic acid) and Ca(OH)_2 (calcium hydroxide)
 - c) H_2SO_4 (sulfuric acid) and KOH (potassium hydroxide)
 - d) $\text{HC}_2\text{H}_3\text{O}_2$ (acetic acid) and NH_4OH (ammonium hydroxide)
- 4) What quantity is being *monitored* in a titration? _____
- 5) What quantity is being *measured* in a titration? _____
- 6) What is an indicator? What is an indicator used for?
- 7) Explain the following terms:
 - a) Equivalence Point
 - b) End Point
- 8) Determine the molarity of a LiOH solution if 25.0 mL of the solution is neutralized by 18.38 mL of 0.112 M HNO_3 solution. [Remember, find mol LiOH first, then divide by volume. The mole ratio is 1:1.]
- 9) Determine the molarity of an H_2SO_4 solution if 25.0 mL of the solution is neutralized by 48.13 mL of 0.187 M KOH solution. [See problem 3c for the balanced equation.]