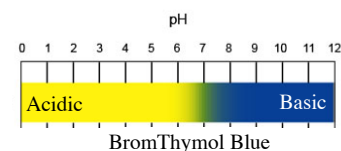


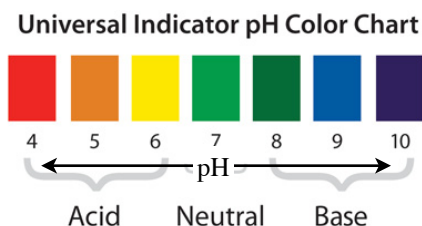
LAD G2 (pg 1 of 1) Acid Base Reaction

Name _____



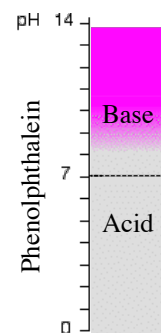
1. Consider the reaction between strong hydrochloric acid and strong sodium hydroxide with BTB indicator to show acidic and basic.
 - a. Write the balanced overall equation.
 - b. Write the net ionic equation.
 - c. Calculate the number of moles of H^+ in 500 ml of 2.0 M HCl (*How warm or cold is the acid sol'n.*)
 - d. Calculate the number of moles of OH^- in 500 ml of 2.0 M NaOH (*How warm or cold is the base sol'n.*)
 - e. Calculate the number of moles of water formed during the reaction. (*Feel the temperature of the neutralized sol'n.*)

2. Consider the reaction between weak acetic acid and strong sodium hydroxide with universal indicator to show acidic and basic.



- a. Write the balanced overall equation.
- b. Write the net ionic equation.

3. Consider the reaction between a *suspension* of magnesium hydroxide and strong hydrochloric acid. (*Test the temp before and after.*) with phenolphthalein indicator to show acidic and basic



- a. Write the balanced overall equation.
- b. Write the net ionic equation. *Eliminate the spectator ions.*
- c. Each teaspoon of Milk of Magnesia contains 400 mg of magnesium hydroxide. Calculate the volume of 1.2 M hydrochloric acid required to neutralize this amount of milk of magnesia in the typical dose of 3 teaspoons. Each teaspoon is 5.0 ml.