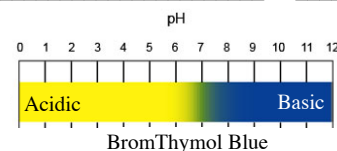


and other **Net Ionic Equation Practice**

1. Consider the reaction between hydrochloric acid and sodium hydroxide solutions with BTB indicator to show acidic and basic.



a. Write the balanced overall equation.

b. Write the net ionic equation.

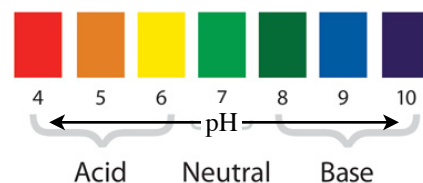
c. Calculate the number of moles of H^+ in 500 ml of 2.0 M HCl (*How warm or cold is the acid sol'n.*)

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 solutions of acetic acid, $HC_2H_3O_2$ and sodium hydroxide with universal indicator to show acidic and basic.

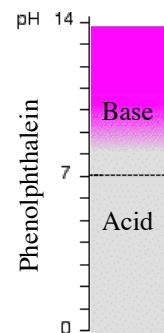
Universal Indicator pH Color Chart



a. Write the balanced overall equation.

b. Write the net ionic equation.

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



a. Write the balanced overall equation.

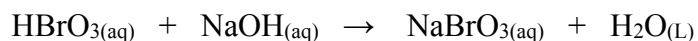
b. Write the net ionic equation. *Eliminate the spectator ions.*

- c. Each teaspoon of Milk of Magnesia contains 400 mg of magnesium hydroxide (58.32 g/mol). 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.

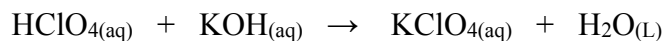
LAD A3 (pg 2 of 2) Net Ionic Equations (Neutralization and other Net Ionic Equations)

Post Lab Practice

1. Is the acid in the reaction below weak or strong? Convert the equation shown below into a balanced net ionic equation.



2. Is the acid in the reaction below weak or strong? Convert the equation shown below into a balanced net ionic equation.



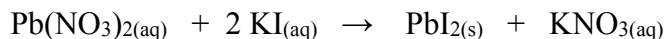
3. Write the balanced net ionic equation for the reaction between aqueous solutions of nitrous acid, HNO_2 , and barium hydroxide, $\text{Ba}(\text{OH})_2$. No precipitate forms. (*Need to write the overall first?*)

4. Convert the equation shown below into a balanced net ionic equation.

(*Hint: net ionic, always means ions, but does not always mean there will be something to cross off.*)

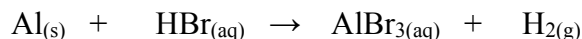


5. Convert the equation shown below into a balanced net ionic equation.



6. Write the balanced net ionic equation to represent the reaction between aqueous solutions of strontium nitrate and sodium hydroxide in which a white precipitate forms.

7. Many metals react with acid to produce hydrogen gas in an aqueous solution. Balance the equation below, and then convert to a net ionic equation.



8. An aqueous solution of nickel(II) bromide will react with aluminum foil to produce an aqueous solution of aluminum bromide and nickel metal. Write the net-ionic equation for this reaction.