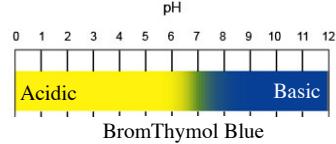


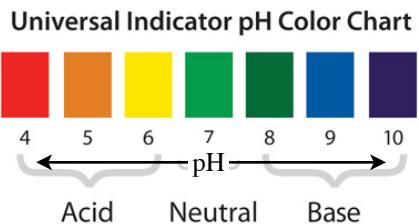
and other Net Ionic Equation Practice

1. Consider the reaction between hydrochloric acid and sodium hydroxide solutions with BTB indicator to show acidic and basic.
- Write the balanced overall equation.



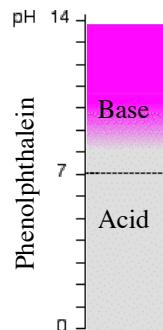
- Write the net ionic equation.
- Calculate the number of moles of H^+ in 500 ml of 2.0 M HCl (*How warm or cold is the acid sol'n.*)
- Calculate the number of moles of OH^- in 500 ml of 2.0 M NaOH (*How warm or cold is the base sol'n.*)
- Calculate the number of moles of water formed during the reaction. (*Feel the temperature of the neutralized sol'n.*)

2. Consider the reaction between solutions of acetic acid, $\text{HC}_2\text{H}_3\text{O}_2$ and sodium hydroxide with universal indicator to show acidic and basic.
- Write the balanced overall equation.



- 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
- Write the balanced overall equation.

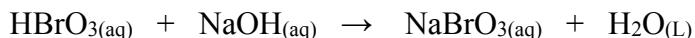


- Write the net ionic equation. *Eliminate the spectator ions.*

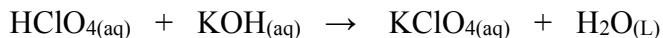
- Each teaspoon of Milk of Magnesia contains 400 mg of magnesium hydroxide (58.32 g/mol). Calculate the volume of 1.2 M hydrochloric acid required to neutralize this amount of milk of magnesia in the typical dose of 3 teaspoons. Each teaspoon is 5.0 ml.

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.



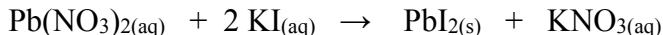
3. Write the balanced net ionic equation for the reaction between aqueous solutions of nitrous acid, HNO_2 , and barium hydroxide, Ba(OH)_2 . No precipitate forms. (Need to write the overall first?)

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.)

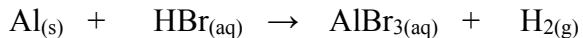


5. Convert the equation shown below into a balanced net ionic equation.



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.