Chemistry 52

Name:_____

EXPERIMENT 8
REPORT FORM

A) Record the pH of each solution:

Solute	pH of solution
NaCl	
$NaC_2H_3O_2$	
NH_4Cl	
Na_2CO_3	
$Fe(NO_3)_3$	
Na_2S	

B) Normalize the pH of your solutions by assuming that NaCl forms a neutral solution with pH=7.0. Adjust pH of other solutions by adding or subtracting a correction factor

Solute	NaCl	$NaC_2H_3O_2$	NH_4Cl	Na_2CO_3	$Fe(NO_3)_3$	Na_2S
Corrected pH						

C) Determine the acid and base that each salt was formed from:

Salt	**Acid**		**Base**	
	Formula	**Strong/Weak**	**Formula**	**Strong/Weak**
NaCl				
$NaC_2H_3O_2$				
NH_4Cl				
Na_2CO_3				
$Fe(NO_3)_3$				
Na_2S				

D) Write equations for each cation or anion that undergoes hydrolysis, and determine if their solution would be acidic or basic. If no hydrolysis occurs, write "No Reaction". (**NOTE**: only ions of weak acids and bases can undergo hydrolysis)

Solute	**Hydrolysis equation**	**Acidic or Basic**
NaCl		
$NaC_2H_3O_2$		
NH_4Cl		
Na_2CO_3		
$Fe(NO_3)_3$		
Na_2S		

E) Based on your results, complete each statement below:

1. Salts of strong acids and strong bases form solutions that are_____

2. Salts of weak acids and strong bases form solutions that are_____

3. Salts of strong acids and weak bases form solutions that are_____