Acid-Base Titration Data Sheet

Student Name:

Partner Name:

Date	Instructor's Initials	Grade

Part One
Mass of KHP =
Moles of KHP =
Moles of NaOH =
Initial volume of NaOH in buret =
Final volume of NaOH in buret =
Volume of NaOH added to the flask =
Concentration of NaOH =
Calculate the concentration of the NaOH solution. Show your work below. Write your NaOH concentration on the board in the front of the classroom. Once all other groups have completed their standardization, we will take an average. This average will be the concentration you will use to complete Part Two.

Part Two		
	Trial 1	Trial 2
Mass of Unknown Acid		
Initial volume of NaOH		
Final volume of NaOH		
Volume of NaOH Added		
Moles of NaOH Reacted		
Moles of Acid (monoprotic)		
Moles of Acid (diprotic)		
Moles of Acid (triprotic)		
Formula Mass of Acid (monoprotic)		
Formula Mass of Acid (diprotic)		
Formula Mass of Acid (triprotic)		
Average Formula Mass of Acid (monoprotic) =		
Average Formula Mass of Acid (diprotic) =		
Average Formula Mass of Acid (triprotic) =		
Show your work for determining the moles of acid present in your sample for trial one.		
Show your work for determining the formula mass of the unknown acid for trial one.		

Name	H^+ Equivalence	Formula Mass (g/mol)
Oxalic Acid	Diprotic	126.065
Succinic Acid	Diprotic	118.088
Sulfamic Acid	Monoprotic	97.1
Citric Acid	Triprotic	210.14

Your unknown is one of the acids in the table above. Based on your experimental results, predict your unknowns identity. Justify your answer.

Calculate the percent error between your experimentally determined formula mass and the formula mass of your predicted acid. Comment on any potential sources of error in your technique.