

<b>A. Notebook. General organization, completeness, documentation, clarity.</b>	<b>Comments</b>
1. Table of Contents up-to-date	
2. Title, dates, signature	
3. Summary of method, reactions	
4. Stepwise working procedure	
5. Data entered in ink, documented. Original data reorganized as needed to produce original, legible record.	
<b>B. Notebook. Calculations and Data Treatment</b>	
1. Data complete	
2. Equations and calculations	
3. Error analysis	
<b>C. Lab Practice</b>	
1. Wears safety goggles at all times	
2. Practices good chemical hygiene (keeps clean, organized work space at workstation and elsewhere in lab)	
3. Arrives on time for beginning of lab	
4. Employs recommended lab techniques (eg, weighing by difference, data entered directly in notebook)	
5. Comes to lab prepared (eg, procedure outlined in notebook)	
<b>General Comments/Recommendations</b>	
<b>Notebook and Lab Practice Grade (10)</b>	
<b>D. Accuracy of Reported Result (100)</b>	

**Detail for Part B**

1. Data Complete
  - a. Complete minimum of 3 trials each for std HCl, NaOH, cross titration, unknown.
2. Data and calculations
  - a. Equation for  $N_{\text{NaOH}}$  with data entered, mean reported
  - b. Equation for  $N_{\text{HCl}}$  vs THAM with data entered, mean reported
  - c. Equation for  $N_{\text{HCl}}$  vs  $N_{\text{NaOH}}$  with data entered, mean reported, compare  $N_{\text{HCl}}$  results
  - d. Equation for %KHP in unknown with data entered, mean reported.
3. Error Analysis
  - a. Standard deviation and 90% confidence limits on average %KHP.