Name _____
Date _____
Due Date _____

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Correct and Hand in Again by _____

Chemistry 11

Experiment 20-C—Acid-Base Titration

Purpose

To use a titration lab to determine the [HCl] in a hydrochloric acid solution of unknown concentration.

Procedure

Do Procedures 1-9 on pages 237-238 of Heath Chemistry Lab Manual.

Observations

[NaOH] Standard Solution = _____M

	Trial 1	**Trial 2**	**Trial 3**	**Trial 4**
Initial Volume NaOH (mL)				
Final Volume NaOH (mL)				
Volume NaOH Used (mL)				

Calculations:

1. Calculate the best average volume of NaOH used in mL

_____mL

in L _____L

2. Calculate the **moles of NaOH** (use average volume from Calculation 1)

_____moles NaOH

3. Write a balanced formula equation for this reaction:

_____

4. Calculate the **moles of HCl** in the flask.

_____moles HCl

5. Calculate the **[HCl]** in the original HCl solution. Round to 2 Significant Digits.

[HCl] = _____M