

## Stoichiometry: Solids and Solutions – Determining the Molarity of a Solution

Name: \_\_\_\_\_ Lab TA: \_\_\_\_\_

Lab Day                      Mon              Tue(am)              Tue(pm)              Wed              Thu(am)              Thur(pm)              Fri

**Grade**

>95      >90      >85      >80      >70      <70

Report:

Prelaboratory Quiz Score:

**Data Collection and Calculations:**

	Trial T	Trial 1	Trial 2	Trial 3 (If required)	Trial 4 (If required)
1. Weight of $\text{KHC}_8\text{H}_4\text{O}_4$					
<u>Moles of <math>\text{KHC}_8\text{H}_4\text{O}_4</math></u>					
2. Final buret reading.					
Initial buret reading.					
Volume of NaOH.					
<u>Moles of NaOH</u>					
3. <u>Molarity of NaOH</u>					
4. <u>Average molarity of NaOH.</u>					
5. <u>% Difference</u>					

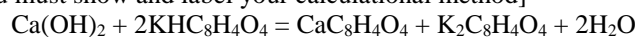
**For Trial 1, show detailed calculational method for:**

<b>2.</b> Moles of NaOH	<b>3.</b> Molarity of NaOH
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**Post Laboratory Question:**

*Your TA will not help you with this final question.*

In a very similar experiment to the one that you have just performed a solution of calcium hydroxide required 26.42mL to neutralize 0.914g of potassium hydrogen phthalate. What was the molarity of the calcium hydroxide solution? [For full credit you must show and label your calculational method]



**Molar Masses:**

KHC<sub>8</sub>H<sub>4</sub>O<sub>4</sub>: 204.24g/mol