General Chemistry 1 Titration 1 Week 6 Name _____

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Task 1: Safety video #6: Preparing for emergencies

After watching the video, reflect on possible emergencies in the general chemistry lab

Describe an emergency that could have happened in the first six weeks of lab

How did we prepare (or could we have) for the emergency you described above?

Task 2: NaOH Standardization Titrations

KHP solution to be used in each titration.

	Fast	Slow 1	Slow 2	Slow 3	Average (use only slow titrations)
Mass of KHP (grams)					
Volume of KHP solution (mL)	25.00				

Calculations

Show all work for these calculations.

Molar mass of KHP ($C_8H_5O_4K$) =

Moles of KHP (average) =

Concentration of KHP (average) = $\frac{moles\ KHP}{Volume\ KHP\ solution\ (L)}$ =

NaOH Solution Record the volumes of the NaOH solution for the fast and slow titrations. Then calculate the average volume used in the three slow titrations.

	Fast	**Slow 1**	**Slow 2**	**Slow 3**	**Average** (use only slow titrations)
Initial burette reading (mL)					
Final burette reading (mL)					
Volume Used (mL)					

Task 3: Calculation of NaOH Concentration

Using the balanced equation and your titration data, determine the ***exact*** concentration (mol/L) of NaOH. You know the approximate concentration is 0.1M, so expect your calculation to be close to that value. Show work.

$$C_8H_5O_4K + NaOH \rightarrow C_8H_4O_4KNa + H_2O$$

Task 4: Reflect on your work today.

What would you suggest to a student that is struggling to determine the endpoint of a reaction? (or answer other prompt instructor provides)