

# Total Acidity Worksheet

## Data Table. Titration of Fruit Juice

Name of Juice Tested		
Rough Titration Data (Step 4)		
Estimated Volume of NaOH Needed to Titrate 20.0 mL of Juice		
Precise Molarity of NaOH Standard Solution		
	Trial 1	Trial 2
Initial Buret Reading		
Final Buret Reading		
Volume of NaOH Added at Endpoint*		

\*Post-Lab Calculation #1.

## Post-Lab Calculations and Analysis

- Determine the volume of sodium hydroxide added to reach the endpoint for each trial and enter the results in the data table.
- Calculate the number of moles of sodium hydroxide required to reach the endpoint for each trial.
- Based on the mole ratio for the neutralization reaction of citric acid with sodium hydroxide, determine the number of moles of citric acid present in 20.0 mL of juice.
- Calculate the mass in grams of citric acid in 20.0 mL of juice for each trial.
- What is the average concentration of citric acid in the fruit juice in units of grams of citric acid per 100 mL of juice?
- Compare the average citric acid concentration in different juices. Based on class data, rank the juices from most acidic to least acidic. Does this ranking agree with the predictions made in Pre-Lab Question #1?