FLINN SCIENTIFIC

Name_____

Introduction to Acid–Base Titration Worksheet

Data Table

BRAND OF VINEGAR: _____ 10 DROPS			
TRIALS	NaOH Used (drops)	Molarity of Vinegar (moles/liter)	Mass of Acetic Acid (grams/liter)
1			
2		% ACETIC ACID: _____ %	
3			
4			
5			
6			
Average			

1. Determine the molarity of the vinegar. Make use of Equation 5. Record the molarity in the Data Table.
2. Determine the mass of acetic acid per liter. Calculate the molar mass of acetic acid, then make use of Equation 7. Record the grams per liter in the Data Table.
3. Calculate the percentage of acetic acid. Make use of Equation 8. Record the percentage in the Data Table.

Drawn-Out Thin-Stem Pipet

A drawn-out, thin-stem pipet provides a smaller and more accurate drop (approximate 50 drops/mL). The drawn-out, thin-stem pipet can be made to the desired length by simply holding the pipet bulb in one hand with the thumb and index finger positioned at the point at which you wish the drawn portion of the stem to begin (see Figure 1).

With the free hand, wrap the exposed portion of the stem around the index finger. Now apply pressure with the thumb to hold the stem in place (see Figure 2).

Gently stretch (draw out) the stem to lengthen it about 3 inches (see Figure 3). Finally, cut the drawn-out stem to the desired length using a sharp razor blade or scissors (see Figure 4).

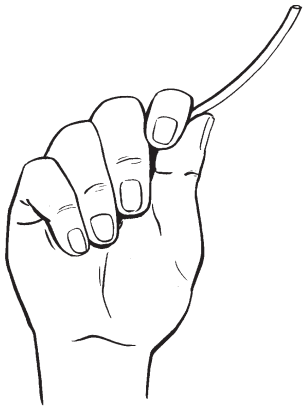

Figure 1.

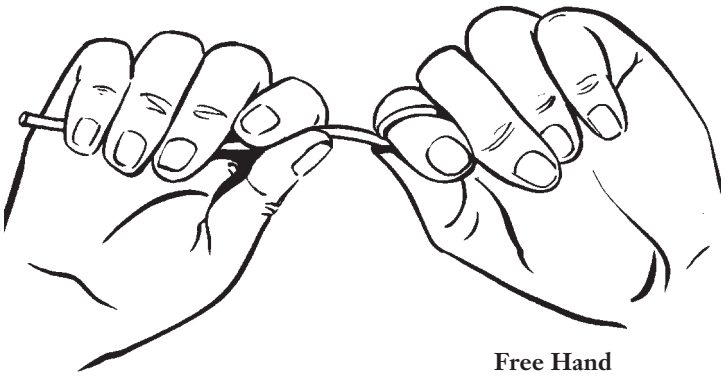

Figure 2.

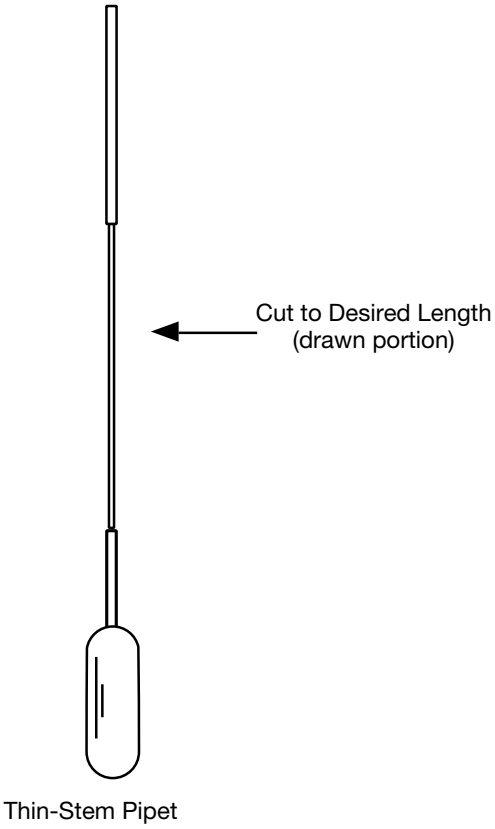

Figure 3.

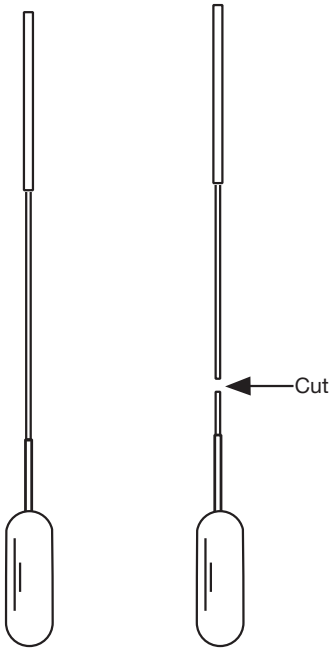

Figure 4.