Dougherty Valley HS Chemistry Acids & Bases – Titration of an Unknown Concentration

Name:

Directions:

- This sheet is taking the place of a formal lab report...so treat it as if it actually matters! Be detailed, thorough, take care in drawing data tables, etc.
- Show all work for calculations.

Prelab Questions:

Complete these questions before you start your titration.

1)	What is the titrand for this lab?	2)	What is the titrant for this lab? Include the concentration.
3)	What is the indicator being used for this lab?	4)	What color shift do you expect to see for this indicator?

Data Table:

Set up a complete, detailed, professional looking data table that is appropriate for the information you will be collecting during this lab. Don't forget to label things!

Calculations:

Show all necessary calculations to determine the unknown concentration of the titrand.



Post Lab Questions:

- 1) Ask your instructor for the correct concentration of the titrand. Show your calculation for your percent error.
- 2) What may have led to someone finding a concentration that was too high? Describe specific experimental errors. (You cannot just say "human error!")

3) What may have led to someone finding a concentration that was too low? Describe specific experimental errors. (You cannot just say "human error!")

4) Another lab experiment was conducted. This time you were told that you titrated 4.5 g of an unknown acid. It took 68.4 mL of a 0.55 M NaOH to reach the equivalence point. What is the molar mass of this unknown acid?