

Name: _____

Chem 10, Section: _____

Prelab Assignment: Titration of Vinegar

1. In this lab, you will perform a titration using sodium hydroxide and acetic acid (in vinegar). Write the balanced neutralization reaction that occurs between sodium hydroxide and acetic acid.

2. Specialized equipment is needed to perform a titration.

a. Consider the sodium hydroxide reactant.

-- Name the specialized device the sodium hydroxide is placed in. _____

-- Is the concentration of the sodium hydroxide known or unknown? _____

-- Is sodium hydroxide the analyte or the titrant? _____

b. Consider the acetic acid reactant.

-- What type of flask is the acetic acid placed in? _____

-- What volume of acetic acid is used? _____

-- What specialized device is used to obtain this precise volume? _____

-- Is the acetic acid the analyte or the titrant? _____

3. You will add sodium hydroxide to the acetic acid until all the acetic acid is consumed. This is a special point in the titration called the _____ point.

4. An indicator solution is used to indicate when all the acetic acid has been consumed and that the reaction is complete.

a. What is the name of the indicator solution? _____

b. Is this indicator mixed with sodium hydroxide or acetic acid? _____

c. How exactly does the indicator let you know when the reaction is complete?