

This lab requires each student to produce a lab report for evaluation.

Feel free to modify this document to make your lab. To do so make a copy (File -> Make a Copy) and share the copy with Caldwell.

Things you need to make:

Header: Create a header (Insert -> Header) and:

- include the lab name (HINT - look at what this document is called)
- include YOUR name
- include the date the experiment will be done
- include the course code (SNC2P)

Purpose: Create a SECTION called "Purpose" (look at previous labs for suggestions on how to format sections)

- include what we are testing (HINT - again, look at the title)
- state if you think you will be successful (remember to be assertive: use words like **will** or **will not** instead of words like **might**, **could**, or **try**)
- make it one sentence long

Materials: Create a SECTION called "Materials"

- include all the equipment and chemicals you will use
- phenolphthalein
- include the amount of each needed as well

Safety: Create a SECTION called "Safety"

- include all safety precautions we need to take (we are working with corrosive material)

Procedure: Create a SECTION called "Procedure"

- outline all the steps you'll need to take to complete the lab.

Observations: Create a SECTION called "Observations"

- create a table that records your observations made during the lab
- include all observations that are relevant

*Make sure the information makes sense to your reader. If you use symbols or short forms you need to explain those

RESULTS:

1. Write and balance the equation of the chemical reaction we are causing in this experiment (HINT: phenolphthalein is NOT involved).

2. Rank the Acid Solutions in order from most concentrated to least concentrated:
3. The Sodium Hydroxide solution was at a concentration of 0.1 M (or 10%). Were the acids at a higher or lower concentration than the Sodium Hydroxide? Explain.
4. List three sources of error in this experiment.
5. Heartburn is caused by stomach acid moving up the esophagus. Antacids work to neutralize the heartburn. Explain, in general terms, how this works.

CONCLUSIONS:

Use the APE method (Answer, Prove, Explain) to write your conclusion based on the following question:

Were you able rank the concentrations of the three acid solutions based on the amount of basic solution added?