(Title Page)
Title of Experiment

Student's Name
Partner
Date

Purpose: The purpose of this lab is to ...
A brief statement describing the main objective or goal of the experiment. Can copy from lab handout.

Introduction: Approximately 1-2 pages in length. Do not paraphrase or recopy the introduction from the lab handout or other possible sources. Put in your own words.

It should include theory relevant to the experiment. Not all relevant theory is included in the lab handout. For example experiments that use acids and bases should include basic acid-base theory in the introduction. The description and basic operation of specialized equipment such as infrared spectrometers or UV spectrometers used in experiments must also be included. Reaction equations should also be included.

It should include definitions and formulae pertinent to the subject of the lab. Only include formulas used in the actual calculations.

Procedure: Refer to lab handout (Title of Experiment).
Any changes made to the experimental procedure must be included.

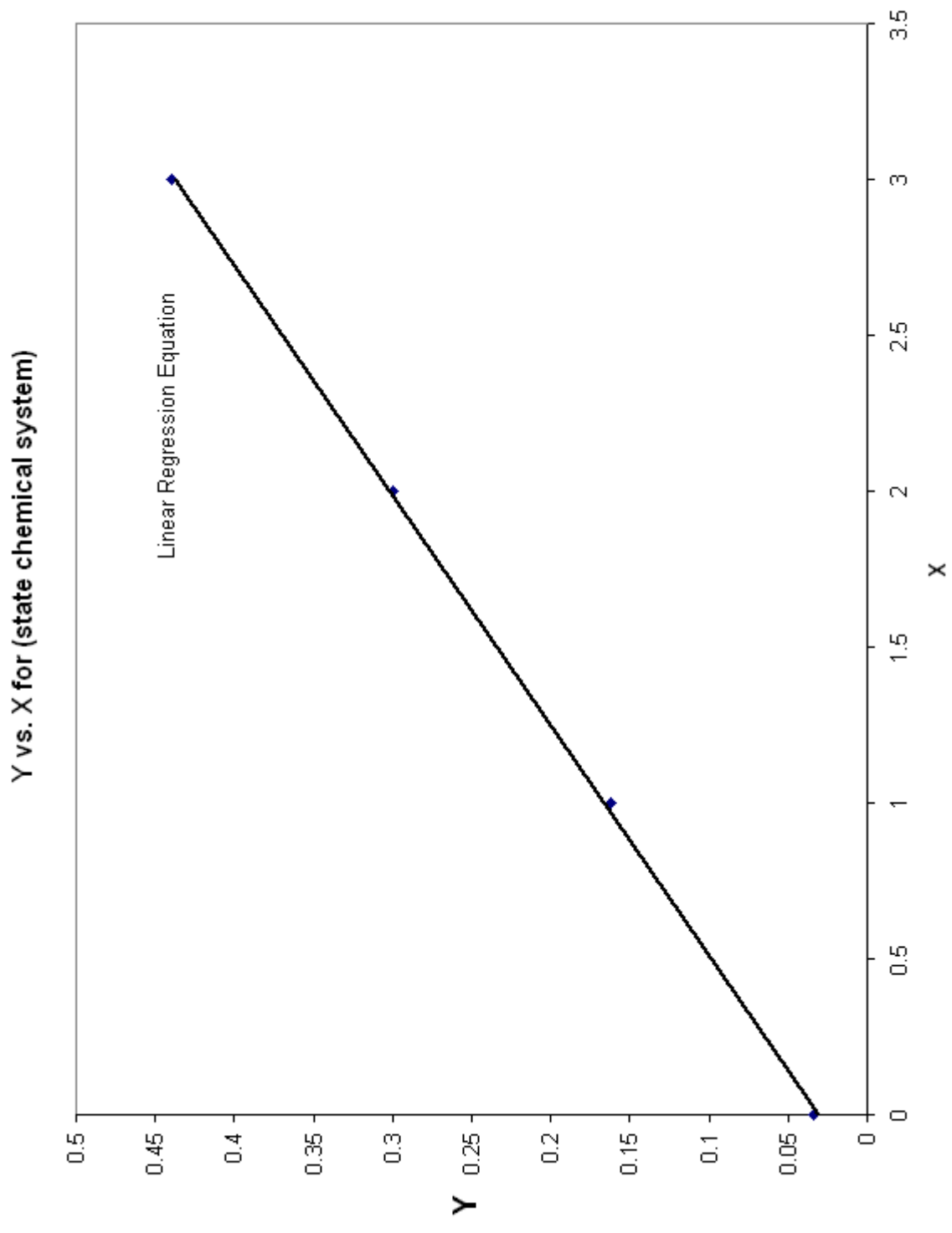
Data/Observations:

Data Table 1:

Data Table listing raw data. Raw data includes all data recorded during the actual experiment. This would include all relevant masses weighed and recorded volumes. All data must be properly labelled and include the appropriate number of significant figures(SIG.FIGS.).

Experimental observations such as color changes and added reagents when observation noted. Stated experimental trends. An example would be the increase in absorbance with increasing concentration of reagent A.
DO NOT explain observations. Just state.

Experimental plots must include a proper title and labelled axis and placed after the data section but before discussion section of lab report. See attached plot as an example.


Y vs. X for (state chemical system)
Linear Regression Equation
Y
X
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
3
3.5

Calculations:

For one trial show one complete calculation with a brief statement describing the calculation.
For example:
The mass of standard used is converted into moles.

Calculation 1

Moles of standard is converted into moles of unknown using balanced equation.

Calculation 2

Moles of unknown is converted into grams of unknown.

Calculation 3.

Data Table:2
Data Table listing calculated data for all trials. Calculated average and standard deviation(if requested).

NOTE: Be sure to label all amounts with proper number of significant figures and units. Example: 25.00 mL of HCl.

Discussion:

Include a restatement of the objectives and whether or not they were met. Discuss any experimental observations, such as the solution turned red when reagent A added, and explain.

Discuss sources of error and explain how they would affect your results. If the experiment didn't produce the correct result discuss possible reasons. Were any assumptions made?!

Discuss your results. The results are what you are looking for and are stated in the purpose. For example if the purpose of the experiment was to determine the concentration of iron in a solution then the final result should be the concentration of iron. Compare your results with known values when applicable.

Conclusion:

Restate the main objective of the experiment and give a brief statement that summarises your results. If the purpose of the experiment is to determine K then the average value determined from all trials should be stated with proper units, if applicable. If the result is temperature sensitive be sure to include the temperature at which it is recorded. If the purpose of the experiment is to determine several variables then a table stating these variables can be used.

References:

Include any sources that were used to write the report, for example, textbooks or reference materials.