TEMPLATE OF A STANDARD LAB REPORT

PREFACE: A good lab report should include **all** the information on the experiment. In this way another experimenter can understand and repeat what has been done by only reading it. Reproducibility is fundamental for the scientific method.

Structure you should follow to write the lab report:

Authors: ..... **Date:** .....

Title: *(Title of the experiment)*

Introduction: *(Write something about the general topic of the experiment, maximum 10 lines)*

Purposes: *(Briefly explain the purposes of the experiment)*

Material: *(List all the materials you used in your experiment, write sensitivity and range of the measurement instruments if it is possible)*

Procedure: *(Describe thoroughly **all** the methods you used to carry out your experiment **[this is important!!!]**, a bulleted list can be useful, you can add pictures of the phases of the experiment if you want)*

Results analysis and discussion: *(In this section the gathered and processed data must be presented. If it is possible insert tables with the data, their measurement errors and the units of measurement. Describe the*

data processing. Add graphs containing your data (if possible), since visual representations are easier to understand.
Report your observations on the experiment, the difficulties you found while carrying out the experiment and your interpretation of the data. Compare the data to explain differences and similarities between different phenomena.
Report if there was something wrong or unusual in the experiment, try to find an explanation about what went wrong. In this case explain what you think could be done in a different way and what you would do to improve the experiment)

Conclusion: *(Sum up your results, without rewriting the data, and explain why your experiment was a success or a failure. Point out possible sources of error.*

Helpful format for writing a conclusion **(length of blank lines does NOT indicate the length of your entries – additional sentences are encouraged):**

This lab (experiment) investigated _____.
In order to study the problem, we _____.
Our results showed _____, thus proving our hypothesis was (correct/incorrect).
We believe the results are (accurate/inaccurate) because _____.
In order to further investigate this problem, next time we would _____.)