

Lab Report Checklist

Title

- ◇ Concise and descriptive

Introduction

- ◇ Provide background information and theory relevant to the experiment performed
- ◇ Explain overall theme of the experiment
- ◇ If specific organisms were used, introduce species by scientific name
- ◇ Explicitly list objectives, hypotheses, and predictions

Materials and Methods

- ◇ Describe experimental design without too much or too little detail
- ◇ Do not present raw or analyzed data

Results

- ◇ Number and title Figures and Tables (Figure 1, 2, 3... Table 1, 2, 3...)
- ◇ Label axes on Figures and show legends
- ◇ Verbally describe and refer to what each table or figure shows (in full paragraphs)
- ◇ Do not interpret what data means

Discussion

- ◇ Interpret the results and relate them back to the overall theme of the experiment
- ◇ Use the results as evidence supporting or refuting hypotheses (not proving right or wrong)
- ◇ Reflect on what could be done to improve the experiment or learn more about different aspects of the system studied
- ◇ Link finding from this experiment to big picture ideas introduced in the Introduction

Work Cited

- ◇ All sources used in the text are cited here
- ◇ Sources not used in the text are not cited here
- ◇ Citations are formatted correctly

| Section | Scientific method step | As well as... |
|---------------------|--|--|
| Introduction | states your hypothesis | explains how you derived that hypothesis and how it connects to previous research; gives the purpose of the experiment/study |
| Methods | details how you tested your hypothesis | clarifies why you performed your study in that particular way |
| Results | provides raw (i.e., uninterpreted) data collected | (perhaps) expresses the data in table form, as an easy-to-read figure, or as percentages/ratios |
| Discussion | considers whether the data you obtained support the hypothesis | explores the implications of your finding and judges the potential limitations of your experimental design |