

Lab Report Writing – Examples of Common Mistakes

The following examples are excerpts from student submitted lab reports from Physics and Biology courses. Each example showcases common mistakes that students make when writing the different sections of lab reports. Can you identify the mistakes? How would you help the student to write more like our models?

Introduction

1. “Our lab group first began to conduct the static approach to the spring constant experiment. We found a few equations that would help us in determining the spring constant of a spring by finding the displacement, or stretching of the spring from different masses.”
2. “Many studies have been conducted to evaluate the effects of competition and mutualism between different species of plants. These studies have a large impact on agricultural practices and habitat conservation. Such studies as ours are often conducted to understand the specific effects of crops and weeds on each other as well as the optimum combination of species and density to maximize productivity rates.”
3. “In the initial experiment, I hypothesize that the predicted outcome of test tubes in Part A will vary due to the diverse characteristics and ingredients in each test tube. In Part B, test tubes 1-4 will absorb less light as the time increases and test tubes 5-7, I hypothesize that the color of each test tube will effect the reactions that take place in them.”

Methods/ Procedure

1. “In our experiment, we found the average spring constant of a static system by entering the data we found in the experiment into excel and graphing our results. Figure 1 shows the values we obtained in the experiment and Figure 2 shows those values in a graph form. The slope of the best fit line made by the data gives us a value for the spring constant of the spring.”
2. “To begin our experiment we filled 28 standard potting plants with potting soil to a uniform height of about four inches. Next we counted out the predetermined number of both mustard and wheat seeds as given in Table 1 (Cardon et al. 2007). After scattering the correct number of seeds randomly in their determined pots we added an extra two seed of each in order to help ensure the correct number of plants grew. We then proceeded to bury the seeds with a light soil covering. These pots were then taken and stored in the green house and given supplemental light and water routinely.”