## Some Sample Lab Reports

- The purpose of a lab report is to tell someone else what you did, why you did it, and what you discovered.
- Your lab reports should follow the standard format – this is not a creative writing essay
- Lab instructions: Find a piece of string and a ruler. Measure the length of the piece of string.

# Alice, Bill, and Charles

 These three students did the "String Lab" last week and have agreed to let you look at their lab reports.

 Title, Introduction, Method, Data and Observations, Conclusions

# Title

- Alice: How long is a piece of string?
- Bill: Experiment with string and ruler
- Charles: My lab report

# Alice's Introduction

 The aim of this lab exercise was to measure the length of a piece of string. This is an important thing to do because it lets me practice writing a sample lab report, have it graded, and learn from any mistakes without affecting my grade. The equipment that I used for this lab exercise included a wooden metre-long ruler and a piece of thick red string.

# **Bill's Introduction**

 I measured a piece of string. We did this lab exercise because the professor talked about string a lot last week, so string must be important. I don't remember what properties of string are important. I performed this exercise using a pencil, a piece of paper, some string, and some other things lying around the laboratory.

# **Charles's Introduction**

 This issss the strin labb. String is long and thin, like spaghetti. I like noodles more than spaghetti.

# Alice's Method

- I selected a piece of string and a ruler from the box. I placed the ruler flat on the table, held one end of the string at the end of the ruler with my left hand, and pulled the string taut along the ruler with my other hand. I recorded the length of the piece of string in my lab notebook. The experiment was repeated several times to determine the accuracy of the measurement.
- Here is a diagram illustrating the experiment. I have labelled everything in the diagram. I made the diagram very big so it is easy to see. I drew my diagram neatly and carefully, using a ruler to draw straight lines.

# **Bill's Method**

 I used a ruler to measure the length of a piece of string. After I put all the equipment away and thought about what to eat for dinner, I wrote down the length of string somewhere. Here is a drawing of a ruler.

### **Charles's Method**

• I found the length of some string.

### Alice's Data and Observations (1)

- Measurement #1: 270 mm
- Measurement #2: 273 mm
- Measurement #3: 271 mm
- Measurement #4: 190 mm

#### Alice's Data and Observations (2)

 The fourth measurement is very different from all the others. My hand slipped when I made this measurement, so it is probably wrong. I shall ignore this measurement. As I performed the experiment, I discovered that string can stretch. I had to be careful not to pull the string too hard when I measured it. Since I needed to pull it a bit to make sure it was taut, not loose and curly, this was difficult. The differences between my three good measurements are due to this problem, to difficulties in keeping one end of the string exactly at the end of the ruler, and the other end of the string sometimes being between two of the millimetre marks on the ruler.

# **Bill's Data and Observations**

- Length of string = 271.23 mm
- The piece of string is exactly 271.23 mm long. My experiment worked exactly as planned. Nothing unexpected happened.

#### **Charles's Data and Observations**

• String = 268

# Alice's Conclusions

 The aim of this lab was to measure the length of a piece of string. My piece of string is 271 +/- 2 mm long. I have written a lab report about a piece of string. I have learnt about the introduction, method, data, and conclusions, which are sections in a good lab report. This is important because it will help me write better lab reports in the future. I also discovered that string is stretchy.

# **Bill's Conclusions**

 Length of piece of string = 271.23 mm. I measured the length of a piece of string. It is important to know how long string is.

### **Charles's Conclusions**

• My string was blue.