1. Why is it important to keep an accurate laboratory notebook?
   1. It is important to keep an accurate laboratory notebook because it will help you to organize your research project, quickly access your methodology and results, and document your experimental process.
2. What are the pros and cons of paper laboratory notebooks? What are the pros and cons of online laboratory notebooks?
   1. Pros of paper notebooks: They are easily transported, and they promote integrity because it is difficult to remove undesirable results.
   2. Cons of paper notebooks: They have limited space, can be lost, and glue is required to include data charts and graphs.
   3. Pros of electronic notebooks: They are convenient if you are collaborating with others; you can easily include data charts/images.
   4. Cons of electronic notebooks: It is easier to delete data, your privacy can be violated if it is online, your files might get deleted if something happens to the server.
3. It is important to record all calculations, even minor ones in laboratory notebook. It is also important to write in formal scientific language.
4. Measures of central tendency are used to represent the whole dataset. The mode is the most common value. The mean is the average of all the values. The mean is the middle value if the dataset is put in order of its values. The mean, median and mode are sometimes inaccurate if the data is not a normal distribution.
5. The measures of variation represent how spread out the data is. The range is the difference between the highest and lowest values. Interquartile range is the difference between the highest and lowest values. Outlier data can negatively affect your results, so you should remove it but only if you are sure that it is not connected to your independent variable. The standard deviation represents the distance from each point to the mean. If the data is normally distributed, then the mean and SD can accurately describe the data. More values always means more powerful/accurate statistics. Variance represents how spread out the data is.
6. Rate of change and total change help to describe how much the data changed over the course of your experiment.