

Lab Report 8/17

The purpose of the lab on 8/17/23 was to familiarize ourselves with basic laboratory equipment such as scales, chemical droppers, pH strips, timers and the metric system. We also monitored some basic bodily functions like heart rate.

Procedure

For the data collection portion of the lab we started out by measuring either our textbook or our notebook in three dimensions: height, width, and depth. My notebook had the following measurements.

1. Length from top to bottom : 27.5mm - 2.75 cm
2. Width from side to side : 215mm- 21.5 cm
3. Depth from bottom to top: 21mm- 2.1 cm

Following the notebook measurements we moved on to volume measurements. We poured an amount of water into a beaker and then transferred it into a graduated cylinder and recorded the measurements.

1. Initial water in beaker : 65ml- 0.65l
2. Water transferred to graduated cylinder: 55ml-0.5l

After the volume measurements we then began PH Measurements.

1. Sample A- 4Ph
2. Sample B- 7Ph
3. Sample C- 9Ph

After completing the Ph measurements we then moved on to heart rate.

1. Pulse rate after 15 seconds = 1.13 beats/second = 67.8 beats/minute
2. Pulse rate after 60 seconds = 70 beats/minute
=1.16 beats/second
=0.00116667 beats/millisecond

Discussion

This lab was easy and its main purpose was to familiarize ourselves with basic lab procedures, using the metric system, and taking heart rates. I don't have many suggestions or any feedback on how to improve the lab as I felt it was easy to understand and well thought out. The only thing I could suggest is to make the directions a bit more specific. But I understand updating the instructions is not something that is feasible as it is a document that has been made well before the class and at the end of the day it's really a non issue.

Conclusion

All in all I feel the lab achieved the goals it set out to, it familiarized my partner and I on how to use the metric system, use basic lab equipment, and how to use the laboratory manual to actually complete the lab. I feel the experiments were simple enough to understand but also helped teach us the importance of accurate data collection and recording. The only thing I'm unsure of is how we lost 10 ml of water between the transfer to the graduated cylinder from the beaker.

