

Jedric Callado

Thursday Lab

August 21, 2023

Laboratory 1 - Physiological Instrumentation

Purpose: The primary objective for this lab is to familiarize and take various measurements of different subjects. We took various measurements for linear, volume, mass, pH, and time.

Procedures: When taking the linear measurements, we were required to utilize any materials we choose to acquire the desired measurements. In this case I had decided to take the measurements of my apple pencil. By using a ruler, I was able to determine its length, width and depth in both mm and cm. For the volume measurements, two materials were required in order to obtain the desired measurements. Using the beaker, we filled it with water and stated the volume in both mL and liters. Next, we poured the water from the beaker into the graduated cylinder and stated the volume. To determine its weight, we used a scale and measured its mass in both milligrams and grams. Next, to measure its pH levels we used testing strips in all three containers (A, B, C). The testing strips would change their color based on the pH levels of the water inside the containers and that is how we would get the measurements for each three containers. Lastly, we needed to use our own pulse to gather data for time measurements. Determining the pulse rate after 15 seconds and after 60 seconds.

Results:

Linear Measurements

Length	182 mm	18.2 cm
Width	12 mm	1 cm
Depth	10 mm	1 cm

Volume Measurements

100 mL	0.1 liters
80 mL	0.08 liters

Mass Measurements

190,830 mg	190.83 gg
195, 090 mg	195.09 g

PH Measurements

Container A	4
Container B	7
Container C	9

Time Measurements

Pulse rate after 15 sec	Pulse rate after 60 sec
15 beats/sec	77 beats/sec
60 beats/sec	19.25 beats/sec
	4.8125 beats/sec

Discussion:

I am confident that I thoroughly understood every aspect of the laboratory. However, I do question my data for the time measurement.

Conclusion:

This laboratory's objective was to introduce us to the different measurements we are to expect for future laboratory. We are seeing such measurements multiple times when making our laboratory reports. We were able to re-introduce ourselves with the use of rulers and reading the measurements of beakers. The utilization of scales and pH testing strips.