Title: Lab Report 1

Part 1

Purpose: The purpose of tonight's lab was to review the different properties of measurement. We measured different objects in cm, mm, ml, and g. My partner and I measured the Ph levels of liquids and the rate of our pulses. We then converted it into beats per second/milliseconds/minute.

Procedure: First, my partner and I took a linear measurement tp begin this lab. We did this by measuring the length, breadth, and depth of our lab manual. Following that, we measured each in millimeters and centimeters. The volume was then measured. We used distilled water to fill a beaker to 3/4 of its capacity before measuring the volume in milliliters and liters. We measured the new volume by mL and L after pouring the same water from the beaker into a graduated cylinder and recording our results. To continue, we weighed a highlighter on a scale to determine its mass and recorded the weight in grams and milligrams. In order to proceed, we weighed a highlighter on a scale and recorded its weight in grams and milligrams. Then, after filling a beaker with water, we placed it on a scale and recorded the mass of the liquid in the beaker in grams and milligrams. We then determined the PH values of three liquids. To achieve this, we placed a piece of PH measuring paper inside each of the three tubes that had been filled with various liquids, allowing the paper to absorb the liquid until the test was complete. Then, we took out the paper to determine the number level it measured by matching the color of each piece of paper to the PH level chart. Finally, to finish off lab 1, we took my pulse and the pulses of my partners for 15 seconds, then again for 60 seconds, recording the data.

MEASUREMENT REVIEW-DATA COLLECTION Linear Measurements

1. State the length of your lecture text: _____260__ mm_____26___ cm

2. State the width of your lecture text: __200_____ mm___20____ cm

3. State the depth of your lecture text: ____10_____ mm____1____ cm

Volume Measurements

1. Pour some water in the beaker and state the volume: _____150_____ ml_____0.15_____ liters (l)

2. Pour the water from the beaker into a graduated cylinder and state the volume: _____42_____ ml_____0.042___ liter

- Mass Measurements
- 1. State the mass of the weight: _____15650_____ mg_____15.65_____ g
- 2. Pour some water into the beaker and state the mass of the liquid in the beaker: ___154400_____ mg _____154.40_____ g

PH Measurements

- 1. State the pH of the liquid in container “A”: ____4_____

- 2. State the pH of the liquid in container “B”: _____7_____
- 3.State the pH of the liquid in container “C”: ____9_____Time Measurements
- 1. Determine your pulse rate after 15 seconds: __1.06_____ beats/second____63.6_____ beats/ minute
- 2. Determine your pulse rate after 60 seconds: ___63_____ beats/ minute__1.5_____ beats/ second_____0.00105____ beats/ millisecond

Time measurements:

Determine your pulse rate after 15 seconds: 1 beats/seconds 63.6 beats/minute

Determine your pulse rater after 60 seconds: 63 beats/minute 1.5 beats/seconds 0.00105 beats/milliseconds

Hot water	5cm	50mm
Room temp	7cm	70mm
Cold water	4cm	40mm

Based on your knowledge of diffusion what is an explanation for these results?

The potassium in the room temperature water diffused the fastest, the hot water diffused the second quickest, and lastly, the cold water made the potassium diffuse the slowest.

Conclusion:

I predicted the hot water would make the potassium diffuse the fastest, but I was wrong. The results for the room temp getting diffused the quickest were surprising. It may have been a personal error from my partner and me. Although, I did predict that the cold water would diffuse the potassium the slowest and I was right.

Part 2

Title: Physiological instrumentation

Purpose: Familiarize ourselves with equipment

Procedure: Details (Make it reproduceable)

Results:

Dependent measured: 44.93 grams 50% sucrose (red)	**Measured**	**Dependent measured:** 442.80 grams 25% sucrose (blue)	**Measured**
Independent time: 5 minutes	48.30 grams	**Independent time:** 5 minutes	

10 minutes	50 grams	10 minutes	45.39 grams
20 minutes	52.74 grams	20 minutes	46.13 grams
30 minutes	55.85 grams	30 minutes	50.98 grams
40 minutes	58.66 grams	40 minutes	52.63 grams
50 minutes	60.58 grams	50 minutes	53.35 grams

Conclusion: In conclusion to this lab, my lab partner and I observed that as time went by the 50% sucrose (red) weighed more. As for the other dependent being measured, 25% sucrose (blue) didn't increase in weight as frequently. We can observe that after the 50 minutes, the 50% sucrose (red) weighed about 7 grams more than the 26% sucrose (blue).