Tammy Foreman

Lab 1

08/28/2023

Title: Physiological Instruments

Purpose: To become familiar with the metric system. Learn how to measure and record data. Also understand the abbreviations and prefixes for each unit.

Procedures:

1. Become familiar with the basic metric units of measure.
2. Learn the basic unit of each measurement.
3. Understand the significance of the prefixes of each unit.
4. Complete the worksheet on page 6 using the following information.

Results:

Using a ruler, my lab partner and I found the following linear measurements for our labs book.

Length- 27.9 mm = 2.79cm

Width- 21.6 mm = 2.16cm

Depth- .6mm = 0.06 cm

Using a beaker and water we found that 75ml = 0.075 liters. Pouring the same water into a graduated cylinder gave us a volume of 70ml = 0.07liters. The mass weight of the water was 118270mg = 118.27g. Weighing the beaker of water was 161750mg = 161.75g. For pH measurements the liquid in “A” was 4, liquid “B” was 8, and liquid “C” was 10. For time measurements my lab partner and I used our own radial pulse. After 15 seconds my pulse rate were 21 beats per second and 84 beats per minute. After 60 seconds my pulse was 84 beats per minute, 0.7143 beats per second, and 714 beats per millisecond.

Discussion: For the first four procedures of measurement my lab partner and I ended up with the same data. For time measurement we had different data collected due to our pulses being different.

Conclusion: In the measurements lab we used a ruler, a beaker, cylinder, water, scale, pH solutions, and our own pulse. After each procedure my lab partner and I collected data. We also converted millimeters to centimeters, milliliters to liters, milligrams to grams, and beats per second to minutes and beats per milliseconds.