Mikayla Verdin

Thursday Lab

09/28/2023

Lab Report One

Purpose: The purpose of tonight's lab was to review different properties of measurement. We measured different objects in cm, mm, ml, l, mg, g. Me and my partner measured the PH level of liquids, and measured the rate of our pulses, then converted it into beats per second/millisecond/minute.

Procedure: My partner and I first measured for linear measurement. To do so, we measured our lab textbook by length, width and depth. Then we recorded our measurements for each in millimeters and centimeters. Next, we measured the volume. For this measurement, we filled a beaker to ¾ of distilled water and then proceeded to measure the volume by milliliter (mL) and litters (L). After we recorded our results, we poured the same water from the beaker into a graduated cylinder and measured the new volume by mL and L. Next, we measured for the mass of a highlighter by putting it on a scale and recorded its weight in grams and milligrams. We also poured water into a beaker, put it on a scale and stated the mass of the liquid in the beaker by grams and milligrams. Next, we measured the pH level of three liquids. To do so, we filled three tubes with different liquids and put a piece of pH paper inside each tube till it absorbed the liquid. Then we pulled out the paper and corresponded each paper's color to the pH level chart to see which number level it measured. Lastly, we measured each of our pulse rates for 15 seconds and then again for 60 seconds. I measured mine by my neck, my partner measured hers by her wrist- either option is okay. We then recorded our pulse rate after 15 seconds by beats/second and beats/minute. For our 60 second measurement we measured it by beats/second, beats/minute, and beats/millisecond.

Results:

Linear Measurements

1. State the length of your lecture text: 280 mm 28 cm

2. State the width of your lecture text: 320 mm 32 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

2. Pour the water from the beaker into a graduated cylinder and state the volume: 42 ml / 0.042 liters

Mass Measurements

1. State the mass of the weight: 1565 mg / 15.65 g

2. Pour some water into the beaker and state the mass of the liquid in the beaker: 54400 mg / 54.40g

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.

Conclusion: Me and my partner both agreed that measuring our pulse rate was the hardest because of the conversion from beats per second to beats per minute. The rest of the measurements were easy, and a good refresher before continuing the rest of the labs this semester.