Dayana Silva

Professor Okerblom

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Purpose

The purpose of this lab is to understand each unit conversion within the metric system and to be able to recognize a solution's acidity or alkalinity by its given pH.

Procedure

A ruler (mm) was used to measure the length,width, and depth of the notebook needed for unit conversions. Other materials used throughout the lab was a scale needed to measure the volume and mass measurement of a beaker with/without water. In the pH measurement section part of the lab liquid labeled A,B,C was individually placed in three individual test tubes , which the pH was then determined by the use of a pH test strip that showed different colors that indicated the levels of acidity. Lastly, for time measurement stopwatches were used to accurately track your pulse rate after 15 sec and 60 sec to then properly convert the results.

Results

The results from this experiment are summarize in table below:

Linear measurement	Volume measurement	Mass measurement	pH measurement	Time Measurement
1. Length of text: 28 mm→ 2.8 cm	1. 100ml → 0.1 L	1. 113000mg → 113.60 g	(A)→ 3 (acidic)	15 sec: 1. 22 beats/sec 2. 88 beats/min
1. Width of text: 23 mm→ 2.3 cm	2. 98 ml → 0.098 L	2. 1238408 mg → 123.84 g	(B) → 6 (acidic)	60 sec: 1. 72 beats/min 2. 1.2 beats/sec
3. Depth of text: 1 mm→ 0.1 cm			(C) → 12 (alkaline)	3. 8.33 beats/milli

Discussion: The results from this lab suggested that the unit conversion can be used to convert the same measurement into a different unit conversion. The Data collected from the lab was relatively similar to my prediction prior to beginning the experiment. There were no experimental errors that were encountered that prevented getting the end results, however an issue that occurred was that solution C would not properly mix with the water giving it a distinct color to gather data from. For pH measurement the acidity of solution A,B,C were indicated by the color of the pH test strip. While data for time measurement was collected by using a stopwatch/timer.

Conclusion; This lab experiment demonstrated unit conversion with the use of linear, volume, mass, pH, and time measurement . With this lab I refreshed my memory of unit conversions and understanding the changes of pH balances and acidity there is. There were new materials that I discovered throughout the lab and allowed me to have a

better understanding of how to take on a specific measurement and convert it to another.