Physiology instrumentation

Purpose: The purpose of this lab was to get familiar with equipment like “the black box” that helps measure the body's physiological events, beakers to help measure water in liters and milliliters, and different measurements using a ruler.

Procedures:

- Become familiarized with the basic metric units of measurement
- Understand the significance of units and be able to convert them.
- Understand the basics of volume of water in a beaker and being able to convert.
- Learn the different PH and be able to state different PH levels of different liquids with PH paper
- Utilize the “black box” to measure the body's physiological events like pulse.

Results:

Linear Measurement	Millimeters	Centimeters
Length of lecture text	156	15.9
With of lecture text	3	0.03
Depth of lecture text	1	0.9

Volume Measurement	Milliliter	Liters
At random water in beaker	75	.075
Transfer from beaker to graduated cylinder	70	.070

Mass Measure	Milligrams	Grams
Beaker with water	0.11355	113.55
Beaker	0.06774	67.74

Ph Measurements	Ph level
Ph of liquid “A”	4
Ph of liquid “B”	7
Ph of liquid “C”	9

Time Measurements	seconds	minutes	milliseconds
Pulse at 15 sec	19	76	7600
Pulse at 60 sec	18	72	7200

Discussions: In this lab we had a chance to learn different types of measurements and practice how to convert them. Some of the measurements we practiced were linear

measurements, Volume, Mass, PH and time measurement. In linear measurements we had to change mm to cm, for volume we changed ml to L, in Mass we change mg to g, when we measured Ph we used Ph paper and went based on a chart that measured different levels of Ph, and lastly we measured time manually by finding our pulse and others by utilizing the “black box” to get more accurate information.

Conclusion: In conclusion, we now have the common knowledge to be able to measure items and liquids and be able to convert to different units. I now will be able to use this knowledge to use in lab when we are working with different types of chemicals.