

Ph lab report assignment



**ASSIGN
BUSTER**

Soapy water Material Required To facilitate this laboratory exercise, the experimenter needs the following: pH strips Sample reservoirs of solutions with varying pH Laboratory Notebook pH paper Background H stands for potential hydrogen. This is a measure of the acidity or basicity of a solution. Acidic and basic are two extremes that describe a chemical property of chemicals. Mixing acids and bases can cancel out or neutralize their extreme effects. The pH scale is a set of standard solutions whose pH is established by international agreement.

A substance that is neither acidic nor basic is neutral. Solutions with a pH less than 7 are said to be acidic and solutions with a pH greater than 7 are basic or alkaline. Pure water has a pH very close to 7. The pH scale is logarithmic and as a result, each whole pH value below 7 is ten times more acidic than the next higher value. For example, pH 4 is ten times more acidic than pH 5 and 100 times (10 times 10) more acidic than pH 6. The same holds true for pH values above 7, each of which is ten times more alkaline than the next lower whole value.

For example, pH 10 is ten times more alkaline than pH 9 and 100 times (10 times 10) more alkaline than pH 8. Primary pH standard values are determined using a concentration cell with transference. This measures the potential difference between a hydrogen electrode and a standard electrode. Measurement of pH for solutions can be done with a glass electrode and a pH meter, or using indicators. pH measurements are important in medicine, biology, chemistry, environmental science, oceanography, etc. Procedure For each of the samples you selected, execute the following steps to acquire the pH. . Cut a strip of pH testing paper utilizing the serrated edge of the

dispenser (1-2 in. Length minimum). 2. Submerge the pH testing strip and immerse in solution for approximately 10 seconds. 3. Remove the strip and promptly compare the results to the specimen colors indicated on the dispenser. 4. Record data for the tested solution. 5. Repeat the steps until you have tested all solutions.

Data	Solution Name	Personal pH Recordings	Group 2 pH Recordings	Group 3 Recordings	average H Recordings
Soda	Orange Juice	3	4	5	
	Iced Tea	6	4	5	
	Lime Juice	3	4	5	
	Water	7	6		
	Milk	7			
	Soapy Water	8			

Conclusion In concluding this lab I found that, in general most groups had similar recordings in their lab. Although, when testing the pH of soda the recording of pH between groups ranged from 1 to 3. A 3 on the pH scale is 100 times more acidic than a 1. The recording did not change much from my earlier predictions. In the beginning of the lab I anticipated that the order of the solutions tested would be in the following on a pH scale: lime juice, orange juice, soda, iced tea, milk, water, soapy water.

This was correct aside from the fact that soda is before orange juice on the pH scale. This is less surprising when reviewing the amount of acid in soda. Acid is listed on average in three forms on a nutrition label for soda. If I were to conduct another lab on pH would test if the level of pH differs from soda brand to soda brand. Overall, the lab familiarized me with the concept and meaning of pH and gave me experience in measuring it, therefore accomplishing the purpose.