**pH Virtual Lab**

**DIRECTIONS**: Go to the science blog, Trimester 1, Water Properties. Click on **pH Virtual Lab** and complete this worksheet.

1. **QUESTION**: What is the pH of common solutions?
2. **BACKGROUND INFORMATION**: Read the information in the left column of the lab and answer the questions in complete sentences.
3. What is pH a measurement of?
4. Discribe one way of measuring pH.
5. The range of pH values is from?
6. An acidic solution has a pH of what?
7. A basic solution has a pH of what?
8. A neutral solution has a pH of what?
9. **OBJECTIVES**: What are the 3 Objectives of this virtual lab?
10. **PROCEDURE**
11. For each solution in the data table, predict the pH value in the “Predicted pH Value” column.
12. Use the pH paper as described in the Procedure (Steps 2, 3 and 4 only) and find the actual pH value of the solutions.
13. **DATA**

|  |  |  |  |
| --- | --- | --- | --- |
| **Solution Name** | **Predicted****pH Value** | **Actual****pH Value** | **Type of Solution****(Acidic, Basic or Neutral)** |
| Stomach Acid |  |  |  |
| Antacid |  |  |  |
| Sea Water |  |  |  |
| Oven Cleaner |  |  |  |
| Orange Juice |  |  |  |
| Lemon Juice |  |  |  |

1. **CONCLUSION QUESTIONS: Answer in complete sentences.**
2. Which solution was most acidic?
3. Which solution was most basic?
4. Which solution was closest to neutral?
5. Tums is used as a remedy for “stomach acid.” Would you expect the pH of Tums to be less than 7, more than 7 or 7? Why?
6. **EXTENTION ACTIVITY:** Seach the web for “pH of Common Household Items.” Complete the table below for any 10 items. **Do not use the solutions you already did in the virtual lab.**

**pH of Common Household Solutions**

|  |  |  |
| --- | --- | --- |
| **Solution Name**  | **pH Value** | **Type of Solution****(Acidic, Basic or Neutral)** |
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