Acid, Base or Neutral? (Part I)

Student Data Log

1. Look at the list of household products on the chart below.
2. For each solution, record your prediction of whether you think it is an acid, base or neutral.
3. Use an eyedropper to put 10 drops of indicator into the test tube labeled 1.
4. Gently swirl the test tube to mix the solution.
5. Observe the color and record your observations on the chart below. Indicate whether the solution is an acid, base or neutral.
6. Clean your solution eyedropper in the water cup and repeat steps 2-5 for each of the solutions.
7. Test your own idea for number 11.

Results

Solution Name	Prediction	Color	Acid, Base or Neutral
1. lemon juice			
2. bleach water			
3. water			
4. tomato juice			
5. milk			
6. ammonia water			
7. tea			
8. vinegar water			
9. soap			
10. soda pop			
11.			

indicator + acid = pink **indicator + base = green** **indicator + neutral = purple**

Acid, Base or Neutral? (Part II)

Student Data Log

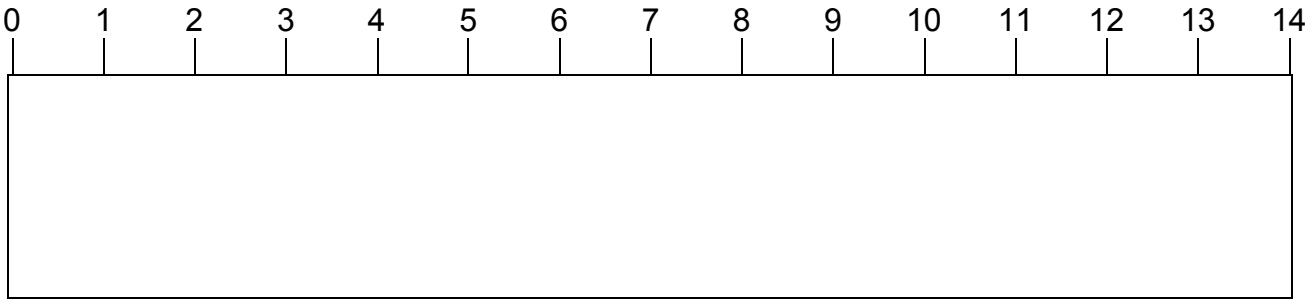
Background Information

Poor water quality can seriously affect the health of a crew of astronauts. The water onboard a spacecraft must be tested frequently to ensure that it is safe for the crew to use. One test that can be performed on the water supply is to measure its pH (percent of Hydrogen), or measuring the acidity level of the water.

Procedures:

1. Transfer the readings from your previous experiment to the chart below.
2. Determine where each of the compounds you measured falls on the pH scale at the bottom of this page.
3. Record the name of each compound in the proper position on the chart according to its pH reading.
4. Color the pH chart using the results from your tests as a guide.

Compound	pH	Compound	pH
lemon juice		soap	
bleach water		ammonia water	
tomato juice		soda pop	
milk		vinegar water	
tea		pure water	



Classify each of the compounds you tested in the columns below.

Strong Acids	Weak Acids	Weak Bases	Strong Bases