

Name: _____

Acid/Base Lab

Directions: Stop at each station and test the pH of the various substances using litmus paper. Fill in the data table below and answer the following questions.

Data Table:

Substance	Color of litmus paper	pH

Questions:

- 1) Create an illustrated pH scale in the space below. Place each of the above substances at the appropriate place on your scale.

2) Why is it so important to wear safety goggles and aprons in this lab?



3) What ion is released by:
a. vinegar? _____

b. baking soda? _____



4) Why is it so crucial to life on Earth that water has a neutral pH level?

5) How does the school tap water and bottled water compare? What does this say about our school water?

6) Where is the antacid on your pH scale? Why do you think antacids are designed this way?

7) What would happen if you combined lemon juice and window cleaner?

8) The equation below shows the chemical reaction between mothballs (CaCO_3) and hydrochloric acid (HCl). Identify the *products* and the *reactants* and *balance* the equation:



9) Based upon the equation above, what do you think will happen to the mothballs when they are mixed with acid? (What is produced by the reaction?)