HOUSEHOLD ACIDS AND BASES

Name _____

Period _____

Purpose: To determine if common solutions are acidic, neutral, or basic.

Procedure: 1. Fill one squirt of each solution into the micro assay trays, then dip each indicator strip (blue litmus, neutral litmus, red litmus) into the solution, taking note of which strip you used. Record the results in the appropriate places in the data table.

2. Follow the above procedure with the pHydrion paper and record the pH number that corresponds with the observed color using the color scale on the side of the container.

3. Determine if the solution is acidic (pH < 7), neutral (pH = 7), or basic (pH > 7).

Data:

SOLUTION	BLUE LITMUS	NEUTRAL LITMUS	RED LITMUS	pH VALUE	ACID, BASE, OR NEUTRAL
VINEGAR					
AMMONIA					
LEMON JUICE					
SOFT DRINK					
TAP WATER					
DRAIN CLEANER					
DETERGENT					
BAKING SODA					
DILUTE HCl					
DILUTE NaOH					

Refer to the data table of this lab to answer the analysis questions that are found on the back of this sheet: Answer in complete sentences!

1. **Is a soft drink acidic or basic? What specific substance does a soft drink contain to give it this property? (Refer to the ingredient label at the lab table)**

2. **How does the pH of vinegar compare with the pH of dilute HCl? Is vinegar a weak or a strong acid? (Strong acids have a pH of 0 – 3; weak acids have a pH of 4 – 6; weak bases have a pH of 8 – 10; strong bases have a pH of 11-14)**

3. **What is the pH of tap water? (Note that tap water is different than distilled water) What could be added to make the tap water neutral but still drinkable?**