

Glue this side down in notebook **AFTER** data table and graph are complete.

## ACID-BASE LAB

### PROCEDURE:

1. Using a vis-à-vis marker to label 8 test tubes with the numbers 1-8 and place them in a test tube rack.
2. Fill a large test tube with water and place it in test tube rack.
3. Pour vinegar into test tube #1 – half full. Fill each of the test tubes to about the same level with the remaining solutions.

### Part 1 – Litmus Paper and pH Paper

4. Obtain *four strips each* of blue and red litmus paper and four strips of pH paper.
5. Tear these strips in half.
6. Place these strips on a paper towel.
7. Use a stirring rod to transfer one drop of vinegar to the blue litmus paper, one drop to the red litmus paper and one drop to the pH paper. Record the color of each in the data table. Record the pH number.
8. Dip the stirring rod in the large test tube, remove, and dry with a paper towel.
9. Repeat step 7 with the remaining solutions. Be sure to clean and dry the stirring rod after each solution.

### Part 2 – Red Cabbage Juice Indicator

10. *After* completing Part 1, add red cabbage juice indicator to each of the 8 test tubes up to  $\frac{3}{4}$  full. Draw test tubes and color each with matching color. Record the color of each solution in the data table.

### Part 3 – Clean Up

11. Pour liquid into sink. Rinse the test tubes with tap water and allow them to drain in the test tube rack. Discard litmus paper and paper towels in the trash.

TEST TUBE #	SUBSTANCE	RED LITMUS (COLOR)	BLUE LITMUS (COLOR)	pH (NUMBER)	CABBAGE JUICE (COLOR)	ACID? BASE? NEUTRAL?
1	VINEGAR					
2	HYDROGEN PEROXIDE					
3	BAKING SODA					
4	DRAIN CLEANER					
5	SHAMPOO					
6	TAP WATER					
7	AMMONIA					
8	MOUTHWASH					

**pH of Substances**

