

Name: _____ Section: _____



Purpose: to identify various substances as either acidic or basic (and to what degree) using pH test papers

Materials:

- pH test papers
- 8 plastic cups
- 8 eye droppers
- baking soda solution
- detergent solution
- vinegar
- lemon juice
- club soda
- fruit juice
- distilled water
- ammonia

Procedures:

At your lab station you will find eight cups labeled "A" → "H." Each of these cups contains a solution that you will be testing.

DO NOT: taste, touch, or smell any of these solutions unless instructed to by your teacher.

1. Gather 8 pieces of pH test paper and place them onto the sheet of paper labeled "A" → "H." If necessary, you may use a small piece of tape to hold the pH papers in place.
2. Starting with solution "A," fill the eyedropper and squeeze 1 - 2 drops of solution onto the piece of pH test paper located in the "A" section of the paper.

3. Wait approximately thirty seconds and then record the color of the pH test paper in your data table.
4. Using the pH test paper reference guide, try to determine the approximate pH number of the solution. Record this in your data table.
5. Determine if the solution is an acid, base, or neutral. Record this in your data table.
6. Repeat steps 2 - 4 for the remaining seven solutions ("B" → "H").
7. Clean up your lab station by discarding all pH test papers and wiping down the area.

Observations/Data:

Solution	Color (pH test paper)	pH	Acid, Base, or Neutral
A			
B			
C			
D			
E			
F			
G			
H			

Conclusion/Questions:

1. Using the information gathered from the lab (and any other resources), try to name the eight solutions.

Solution	Name
A	
B	
C	
D	
E	
F	
G	
H	

2. Do you think the use of litmus paper (red & blue), in addition to the pH test papers, would have been helpful in identifying the solutions as an acid, base, or neutral? Explain your reasoning.

3. Using the pH scale below, place the eight solutions you tested in the appropriate location while considering their determined pH.

Low H^+ concentration



High H^+ concentration

A	B	C	D
E	F	G	H