

Name _____

Date _____

pH

pH is a scale for expressing the acidity or alkalinity of a solution. A pH value of 7 indicates a neutral solution. A pH value of **greater than 7** indicates a basic solution and a high concentration of hydroxide ions. A pH value of **less than 7** indicates an acidic solution and a high concentration of hydronium ions.

Chemical compounds called **indicators** change color in the presence of certain ions. A colorless solution called phenolphthalein turns pink in the presence of a base. A dye called litmus turns red in an acid and blue in a base.

Determine if the solutions listed are acids or bases. Write the color expected for the two indicators listed. Indicate the expected pH range:

neutral = pH = 7, acid = pH < 7, base = pH > 7.

Solution	Acid or Base	Phenolphthalein	Litmus	pH Range
Lemon juice				
Coffee				
Milk				
Ammonia				
Rain				
Laundry Detergent				
Toothpaste				
Vinegar				
Soda Pop				
Digestive juices				
Human blood				
Vitamin C				
Sour Candy				
Drain cleaner				
Saliva				
Shampoo				