

## Acid-Base Test

Acids bases and salts are all around us. Concentrated acids and bases are harmful; they should not be touched with bare hands.

Vinegar is an example of an aqueous solution of acetic acid, aspirin is acetylsalicylic acid. Milk of magnesia contains magnesium hydroxide.

1- Pick from the text the two acids and the base.

Acids:

Base:

2- Based on the following table:

	BTB	Litmus	Phenolphthalein
Acidic Solution	Yellow	Red	Colorless
Basic Solution	Blue	blue	pink

2.1- Extract the names of two indicators, other than B.T.B, that are used in the lab.

2.2- Complete:

a- acidic solution + litmus → .....

b- Basic solution + Phenolphthalein → .....

2.3- Explain why a blue litmus paper cannot be used to identify bases.

3- When few drops of B.T.B are added to dilute sulfuric acid solution, the solution imparts a yellow color. When few drops of B.T.B are added to a dilute ammonia solution, the solution imparts a blue color.

A student used B.T.B in the lab with some substances he got from the house. Then he tabulated the results.

3.1- Fill in the following table by putting a tick in the suitable box related to range of pH.

Substance + B.T.B	Color	pH<7	pH>7
Tomato juice	Yellow		
Window cleaner	Blue		
Bleach	Blue		

3.2- Classify the tabulated substances into acidic and basic

Acidic substance(s):

Basic substance(s):

3.3- Give two ways to measure pH of a given solution.

3.4- Do you advise somebody to drink tomato juice on an empty stomach? Explain.