

**Provincial Educational Department – Sabaragamuwa – Weekly School**

Subject - Science

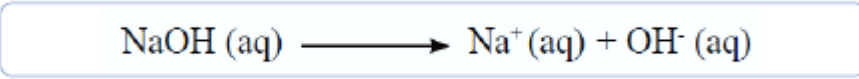
Week – June 14- 18

Grade - 11

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**Bases**

- Bases that are used in laboratory  
     **NaOH** – Sodium hydroxide      **KOH** -Pottasium hydroxide
- Base is a .....



- Bases are grouped as strong bases and weak bases according to their ability of releasing OH- ions in an aqueous medium.

**Strong bases**

- Bases that get completely ionised and release OH- ions in an aqueous medium.

**Weak bases**

- Bases that get partially ionised and release OH- ions in an aqueous medium.

**Physical and chemical properties of bases.**

- Has lubricant property.
- Reacts with acids and form salt and water.
- $2\text{NaOH (aq)} + \text{H}_2\text{SO}_4 \text{(aq)} \longrightarrow \text{Na}_2\text{SO}_4 \text{(aq)} + 2\text{H}_2\text{O (l)}$
- Turns red litmus in to blue.

**Write uses of following bases.**

Sodium hydroxide	Magnesium hydroxide

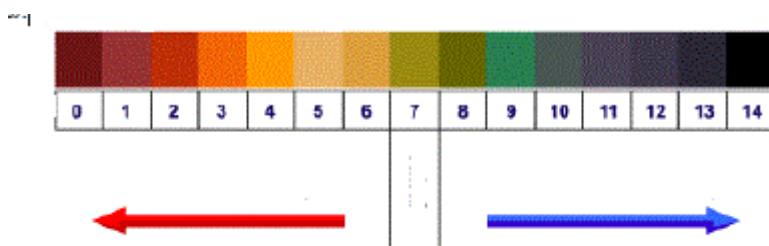
## Identification of acids and bases using indicators.

Solution	Litmus red/blue	Methyl orange	Phenolphthelin
Dil. Hydrochloric acid			
Lime juice			
Dil. sulphuric acid			
Vinegar			
Dil. sodium hydroxide			
Soap water			

Indicator	Colour in acid	Colour in base
Litmus		
Phenolphthelin		
Methyl orange		

## pH scale

- pH scale is used to give a numerical value to acids and bases.
- pH papers are yellow in colour and used to identify acids and bases.



## Salts

- Solutions without having any acidic or basic property are called as salts.
- Salts are prepared by reaction between acids and bases.



Write uses of salts.

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What is called as neutralisation?

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Write uses of neutralisation.

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