

Acids, Bases and Salts.

* Water soluble bases are known as Alkali.

Acids.

* having Sour taste.

Ex! - Lemon - citric acid

Milk - Lactic acid.

Stomach - Hydrochloric acid.

* Acid converts Blue litmus to Red litmus colour.

* pH range of acid is from 0 - 6

Bases / Alkali

* Bitter taste.

Ex! - Ammonia. - NH_3

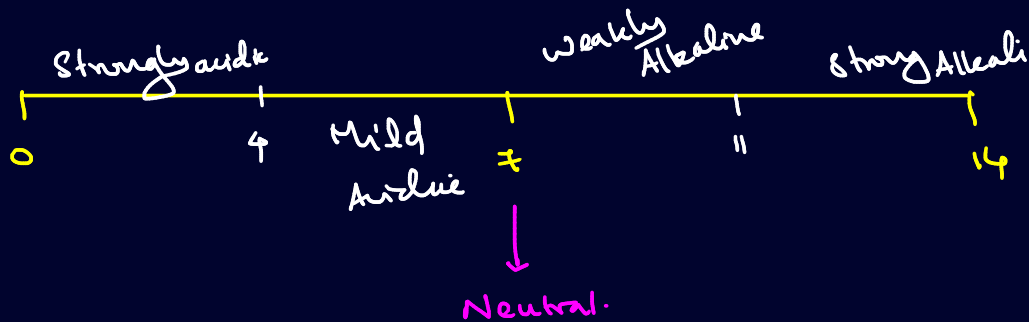
Sodium Hydroxide (NaOH)

* Alkali changes Red litmus to Blue colour.

* pH range of Alkali is from 8 - 14.

What is pH = ?

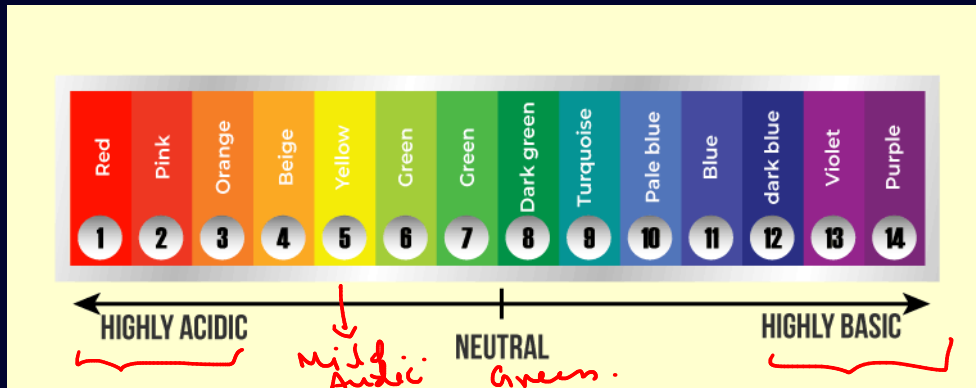
pH is a scale from 0 - 14; and it is measuring on the basis of amount of H^+ ions present in a sample.



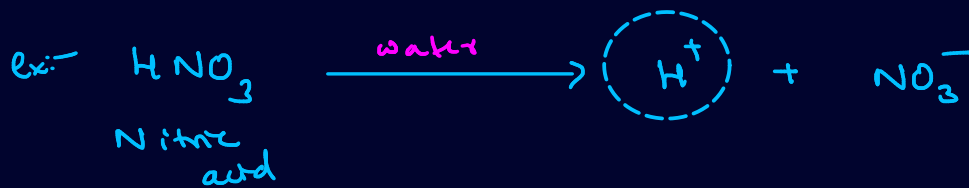
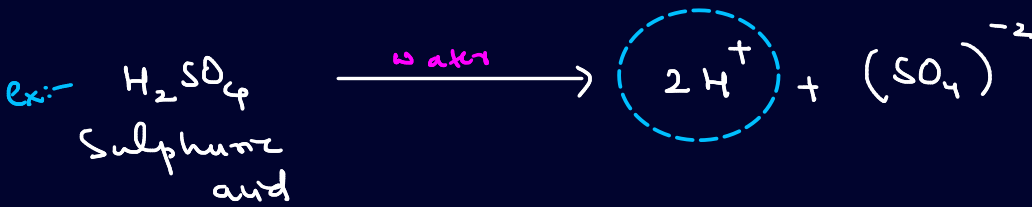
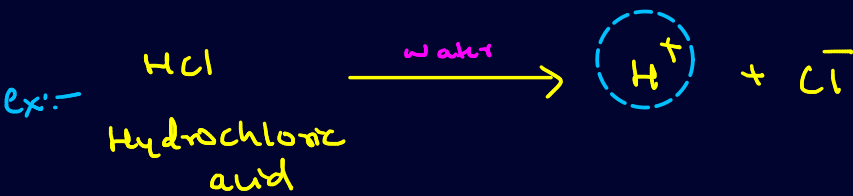
* The pH of A = 2 and pH of B = 4; which is strong acid?

* Universal Indicator

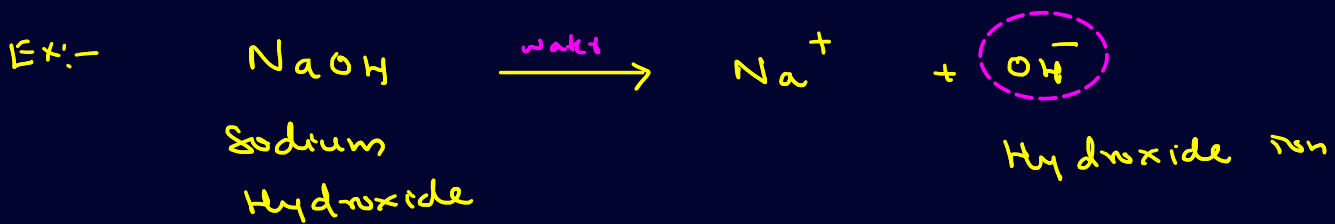
shows colours for different pH range.



* Acids contains H^+ (proton) ion presents.



* Alkali contains OH^- (Hydroxide) ions.



Summary questions

- 1 a What distinguishes alkalis from other bases? *water soluble.*
 b What do all alkalis have in common? *OH⁻ ion.*
 c Show the change that happens when potassium hydroxide (KOH) dissolves in water using an equation, including state symbols.
- 2 a What ions do all acids produce in aqueous solution? *H⁺*
 b Show the change that happens when hydroiodic acid (HI) dissolves in water, including state symbols. *HI $\xrightarrow{\text{water}}$ H⁺(aq) + I⁻(aq).*
- 3 How could you use universal indicator paper as a way of distinguishing between distilled water, sodium hydroxide solution, and ethanoic acid solution? *pH = 7 green. Purple. Yellow colour.*
- 4 Which would be the more accurate way of finding the pH of a solution, using universal indicator paper or a pH sensor and datalogger? Why?



→ Vinegar.

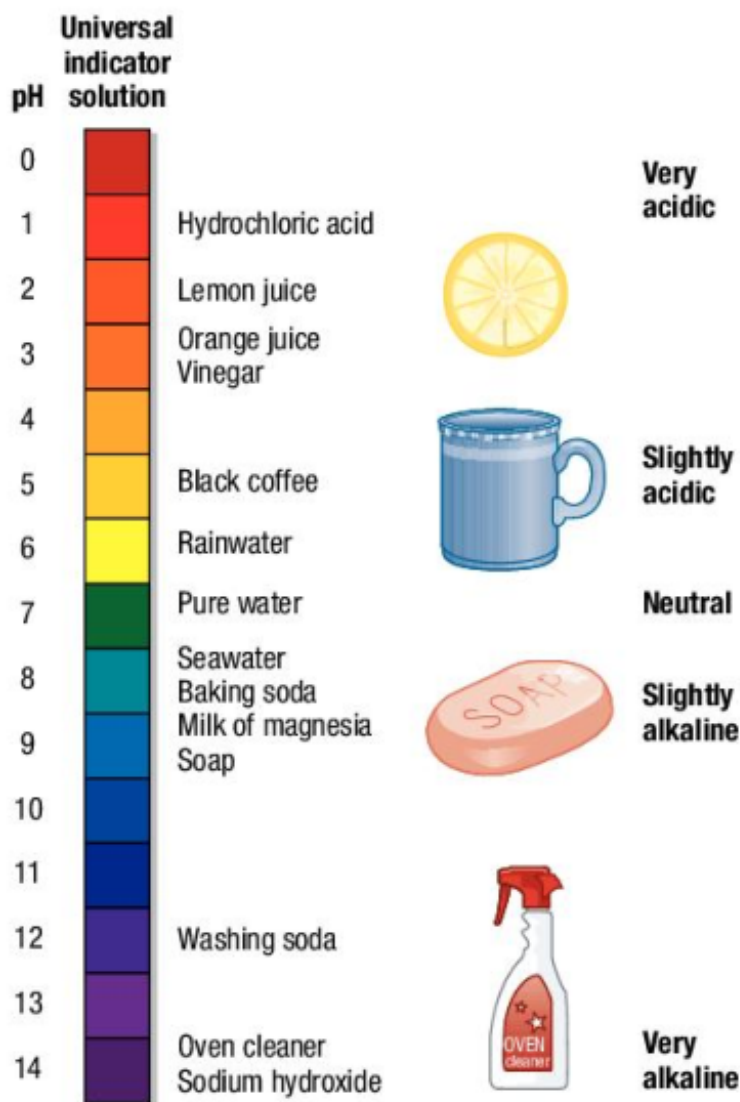
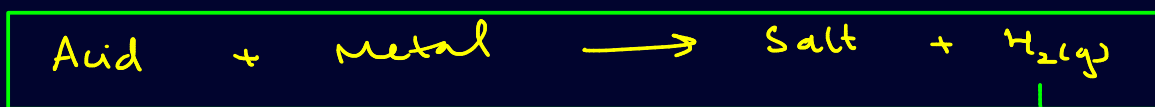


Figure 2 The pH scale tells us how acidic or alkaline a solution is

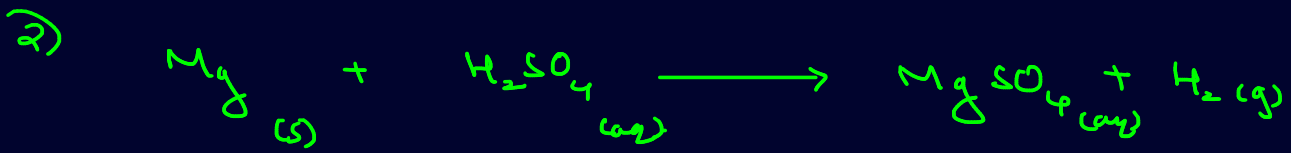
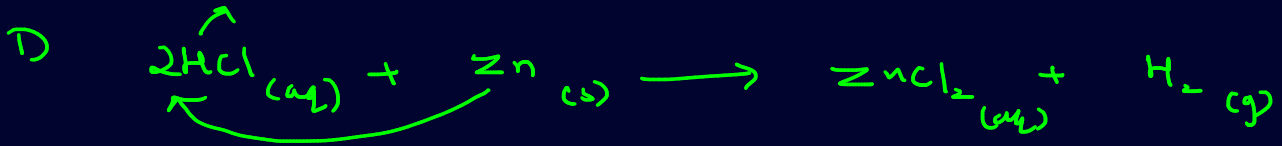
Reactions of Acids & Alkali

1. Reaction of Acid + Metal :-



Ex:-

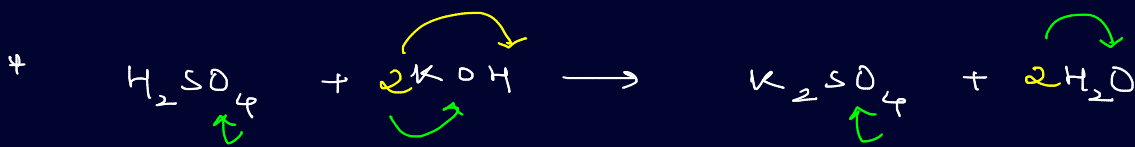
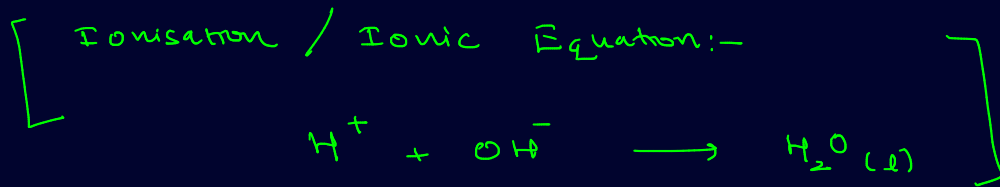
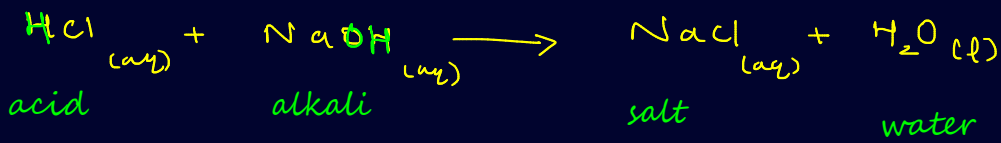
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Bubbling



Neutralization

Acids and base reacts each other and Neutralize each other.

* Ex:-



How to write molecular formula:-

