



Tuesday, 14 January 2025

➤ What is an acid?

- ❖ Acids are substances that donate **hydrogen ions (H^+)** in aqueous solutions.
- ❖ They typically taste sour and turn **blue litmus paper red**.
- ❖ Examples include **hydrochloric acid (HCl)** and **citric acid**.

➤ What is a base?

- ❖ Bases are substances that **accept hydrogen ions (H^+)** or **release hydroxide ions (OH^-)** in aqueous solutions.
- ❖ They often taste bitter, feel slippery, and turn red litmus paper blue.
- ❖ Examples include **sodium hydroxide (NaOH)** and **ammonia (NH_3)**.

➤ What is the pH scale?

- ❖ The pH scale measures the acidity or basicity of a solution, ranging **from 0 to 14**.
- ❖ A pH below 7 indicates an acid, a pH of **7 is neutral**, and a **pH above 7 indicates a base**.
- ❖ The scale is logarithmic, meaning each unit change represents a tenfold change in **H^+ concentration**.

➤ How do acids and bases neutralize each other?

- ❖ When mixed, acids and bases react to form **water and a salt** in a neutralization reaction.
- ❖ The general reaction is: **Acid+Base→Salt+Water**