Acids, Bases and Salts

- Substances that are sour to taste are acidic in nature and those that are bitter to taste and soapy to touch are basic in nature.
- Chemicals that are used to check acidic or basic nature of substances are called **indicators**. One of the most commonly used indicators is litmus solution (a natural indicator). Acids turn blue litmus paper to red and bases turn red litmus paper to blue.
- Turmeric paste and China rose are also natural indicators. China rose indicator becomes dark pink when an acidic substance is added to it and turns to green when a basic substance is added to it. Turmeric paste remains yellow in acidic solutions but turns to red in basic solutions.
- Substances that are neither acidic nor basic in nature are called neutral substances. Neutral substances do not affect the colour of indicators.
- When an acid is mixed with a base, they neutralize the effect of each other. This
 reaction is known as neutralization reaction. Water and salt are produced as products
 during the neutralization reaction. Heat is also produced during the neutralization
 reaction.

Acid + Base → Salt + Water + Heat

- The salt produced during neutralization reactions can be acidic, basic, or neutral in nature.
- Acidic salts= weak base + strong acid
- Basic salts= weak acid + strong base
- Neutral salts= strong base + strong acid

- Ant sting contains formic acid. The effect of this acid is neutralised by rubbing moist baking soda (sodium hydrogen carbonate) or calamine solution that contains zinc carbonate.
- Milk of Magnesia (magnesium hydroxide) is an antacid used to neutralise the effect of excess of acid produced in our stomach.