

Chapter 4: Chemicals and Chemical changes

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Types of changes

Physical Change

- Appearance or form changes
- Subst. remains same
- Physical Characteristics:
 - Lustre
 - Texture
 - Hardness
 - Odour
 - Sounds
 - Temp.
 - Mass
 - Volume
 - Density
 - Color
 - Malleable
 - Ductile
- E.g.:
 - Ice → Water @ Melting
 - Water → Ice @ Cooling

Chemical Change

- New subst. forms
- Irreversible
- Chemical Properties:
 - flammable
 - corrosive
 - pH
 - explosive
- E.g.:
 - Wood → carbon @ Burning
 - Iron → rusted @ Rusting
 - Burning of matchstick @ Combustion

Metals & Non-metals

Metals

Good conductors

Ductile

Sonorous

High tensile strength

High density

High melting & boiling

Combine with oxygen and form basic oxides

Non-metals

Bad conductors

Non-ductile

Non-sonorous

Low tensile strength

Low density

Low melting & boiling

Combine with oxygen and form acidic oxides