Characteristics of Frequently Used Materials

Introduction

Materials have distinct properties that determine their usability in different applications. Understanding these properties helps us choose the right material for specific purposes.

Properties of Commonly Used Materials

Glass

- Hard and transparent, making it ideal for windows.
- Not soft or flexible, which is why it is unsuitable for clothing.
- Smooth texture.
- Insoluble in water.
- Can be either transparent or translucent.
- Higher density than water.

Metal

- Shiny in appearance.
- Can be hard or soft (in molten state).
- Conducts electricity, making it suitable for electrical wires.
- Smooth surface.
- Opaque in nature.
- Higher density than water.

Plastic

- Dull in appearance.
- Can be hard or soft.
- Insoluble in water.
- Smooth texture.
- Can be opaque or translucent.
- Lower density than water.
- An insulator, making it useful for coating electrical wires.

Wood

- Dull in appearance.
- Hard and rough texture.
- Insoluble in water.
- Opaque.
- Lower density than water.

Matter: The Fundamental Building Block

Matter is anything that has mass and occupies space. Everything around us, including living and non-living things, is made of matter.

Properties of Matter:

Mass: The amount of matter in an object, measured in kilograms (kg) or grams (g).

Volume: The space occupied by matter, measured in liters (L) or milliliters (mL).

Examples of Matter:

- Living Things: Humans, animals, and plants.
- Non-Living Things: Air, water, food items, and objects.

Significance of Matter

Matter exists in various forms and is the foundation of everything we sense and interact with in our surroundings.