



Materials and Their Properties

Materials

- Anything which has mass and occupies space is known as **matter**.
- The matter from which an object can be made is called material.
e.g. Glass, metal, plastics, wood, cotton paper, soil, etc.

Properties of Materials

Following are the various properties of materials

Appearance

On the basis of the appearance of the material, they are categorised into two types:

Shiny and **dull** materials.

- e.g.
- Iron, copper, aluminium, gold, etc, have a shiny appearance i.e., lustre.
 - Paper, chalk, plastic, rubber, etc, have dull appearance.

Hardness and Softness

- Materials which can be compressed and scratched easily are called soft materials, e.g. Cotton or sponge, etc.
- Materials which are difficult to compress are called hard materials, e.g. Iron, rod, etc.

Solubility of Materials

- On the basis of ability of a material to dissolve in water, i.e. solubility, the materials are categorised into two types soluble and insoluble materials.
- Materials which completely disappear or get dissolved in water are called **soluble materials**, e.g. Sugar, salt, etc.
- Materials which do not mix or get disappeared on mixing with water are called **insoluble materials**, e.g. Sand, dust, etc.

Floating or Sinking Property

- Some materials that do not mix in water rather floats on its surface are called floating materials, e.g. Dried leaves fallen on the surface of water, plastic ball, etc.
- Heavy materials which sink easily to the bottom of the water are called sinking materials, e.g. Stone, drops of honey, etc.

Transparent, Opaque and Translucent

- The substances or materials through which an object can be seen clearly are called transparent material, e.g. Glass, water, etc
- The materials through which we are not able see object and which do not allow light to pass through them, are called opaque materials, e.g. Wood, cardboard, etc.
- The materials through which an object can be seen but not clearly are called translucent materials, e.g. Oil paper, muslin, cloth, etc.



Practice Exercise

- 9.** Dried leaves will on the pond.

Answers

[illegible]