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## CHAPTER – 4

### Sorting Material into Groups

- Objects around us are made up of a large variety of materials.
  - A given material could be used to make a large number of objects. It is also possible that an object could be made of a single material or of many different types of materials.
  - Different types of materials have different properties.
  - Some materials are shiny in appearance while others are not. Some are rough, some smooth. Similarly, some materials are hard, whereas some others are soft.
  - Some materials are soluble in water whereas some others are insoluble.
  - Some materials such as glass, are transparent and some others such as wood and metals are opaque. Some materials are translucent.
  - Materials are grouped together on the basis of similarities and differences in their properties.
  - Things are grouped together for convenience and to study their properties.
  - Materials are classified based on their properties like: appearance, hardness, solubility, float/ sink, transparency, conduction of heat, states of matter, conduction of electricity, attraction towards magnets, combustibility.
  - Advantages of classification:
    - (a) Helps in identification of objects.
    - (b) Helps in sorting of objects.
    - (c) Helps in locating things.
    - (d) Makes study of different objects easy and more meaningful rather than studying each other separately.
    - (e) Helps in understanding similarities and dissimilarities among objects.
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