

Long Answer Questions

Q.1. Define soluble, insoluble substances and solubility.

Ans. The substances which dissolve in water are called soluble substances. For example: Salt, sugar, milk, etc. The substances which do not dissolve in water are called insoluble substances. For example: Chalk powder, sand, stone, etc. The property of substance due to which it dissolves in water is called solubility.

Q.2. Chalk, iron nail, wood, aluminium, candle, cotton usually look different from each other. Give some properties by which we can prove that these materials are different.

Ans.

The given materials can be differentiated on the basis of lustre, hardness, softness, roughness or smoothness.

	Lustre	Hardness	Softness	Roughness	Smoothness
Chalk			✓	✓	
Iron nail	✓	✓		✓	
Wood		✓		✓	
Aluminium	✓	✓			✓
Candle	✓		✓		✓
Cotton			✓		✓

Q.3. Differentiate among opaque, translucent and transparent materials, giving one example of each.

[NCERT

Exemplar]

Ans.

S. No	Opaque materials	Translucent materials	Transparent materials
1	Objects cannot be seen through them	Objects can be partially seen through them	Objects can be seen clearly through them
2	Example: Cardboard	Example: Oiled paper	Example: Hand lens

Q.4. How can materials be grouped together? In what ways do we classify materials?

Ans. Different materials have different properties. Materials with similar properties can be grouped together.

Different types of materials can be grouped based on any of the following properties:

- Appearance
- Solubility
- Transparency
- Conductivity
- Combustibility—Easily burn or not.
- Attraction towards magnet.