



Chapter 6

Materials Around Us

Q.1 Write the summary of the chapter in the flow chart below, using the hints given below:

- 1. Classification & its need:** To distinguish materials on their behaviour is called classification need :
 - a) easier to locate things.
 - b) helps to understand properties of various materials
- 2. Lustre:** The Shine present in a material is known as Lustre Materials that had lustre are called lustrous materials.
e.g; Metals are generally lustrous in nature.
- 3. Transparent & Opaque:** Materials that allow light to pass through them are called transparent on objects.
e.g; Glass materials the don't allow light to pass through are called opaque objects
- 4. Solution:** A solute and a solvent make up a solution.
e.g; In a salt solution, salt is solute and water is solvent
- 5. Saturated solution:** When no more solute can be dissolved in the solvent at a given temperature, then it forms a saturated solution.
- 6. Matter:** Anything that has mass & Occupies space is called matter Three are 3 states of matter. solid, liquid & Gas.

Q2. Multiple Choice Questions

1. b) weight of an object varies at different places.
2. a) i only
3. a) hard and lustrous
4. a) allows the light to pass through it
5. b) sink, float

Q3. Fill in the blanks:

1. **Solute** and **Solvent** makes a solution.
2. Sugar is **Soluble** in water.
3. Air is **Matter** as it has mass and occupies space.
4. SI unit of mass is **Kg**
5. Amount of **Space** occupied by matter represents volume.

Q4. State whether the statements are 'True' or 'False'.

1. Copper floats in water. **False**
2. Solubility increases with the increase in temperature. **True**
3. Water is known as universal solvent. **True**
4. Oxygen is insoluble in water. **False**
5. Diamond is a non-lustrous material. **False**

Q5. Give one word for the following:

1. Amount of space occupied by matter. **Volum**
2. The materials that cannot be scratched or compressed. **metals**
3. Materials that do not allow light to pass through them. **opaque**
4. The special shine present in a metal. **Lustre**
5. When no more solute is dissolved in a given solvent at a given temperature. **Saturated solution**

Q6. Match the columns:

1.

	Column I		Column II
I	Sugar	B	Soluble
II	Wood	C	Float
III	Petrol	D	Immiscible
IV	Iron	A	Sink

2.

	Column I		Column II
A	Wood	R	Opaque
B	Gold	S	Lustrous
C	Spectacles	P	Transparent
D	Frosted glass	Q	Translucent

Q7. Assertion and Reason Questions

Choose the correct options

1. **Assertion (A):** Soil is a matter.

Reason (R): Anything that has mass and occupies space is matter

Ans (A) Both the assertion and reason are true, and the reason is the correct explanation.

2. **Assertion (A):** The scientific method includes asking questions, making guesses, and doing experiments.

Reason (R): The scientific method is a way to solve problems step by step.

Ans (A) Both the assertion and reason are true, and the reason is the correct explanation.

Q8. Very Short Answer Questions

1. Name a transparent material used to make tumbler.

Glass

2. What is a material?

Materials are substances that are used to make different objects. eg. steel

3. Name any two i) natural and ii) man-made materials.

(i) Gold, Carbon

(ii) Plastic, nylon

4. Why we do not make a tumbler with a piece of cloth or paper?

Tumbler needs to be made with a hard material while cloth or paper will absorb water and will not be able to hold it.

5. Why is air transparent?

As it allows light to pass through it.

Q9. Short Answer Questions

1. Gold is used to make jewellery. Why?

Gold is a noble metal as it is not affected by air, moisture etc. it does not undergo corrosion.

2. Differentiate between hard and soft materials.

Hard Materials

Soft Materials

They are not compressed easily. They are compressed easily

3. Define lustre.

The shine present in some materials is known as lustre.

4. Why shopkeepers prefer to keep eatables in transparent containers?

So that the customer can see the eatables kept in the glass.

5. Define classification. How objects can be classified?

To segregate materials on the basis of their behavior is known as classification. Objects are classified on the basis of hard or soft, lustrous or dull etc.

Q10. Long Answer Questions

1. Air is considered as matter. Justify.

Air is matter as it has mass and occupies space. Air exerts atmospheric pressure on us. moving air can carry dust particles, paper etc.

2. Differentiate between opaque, transparent and translucent materials.

Opaque: Do not allow light to pass through. eg. wood, wall

Transparent: Allow light to pass through. eg. glass, water

Translucent: Allow partially light to pass through. eg. frosted glass, butter paper

Q11 Case Study Based Question

Rita and Rohan collected some materials Like rubber, plastic, wood, clay, play doh, mirror, frosted glass, glass, sponge, steel spoon. They studied The properties of these materials

- a) **Which Materials were hard ?**
wood, mirror, frosted glass, glass, spoon
- b) **What are transparent materials ?**
That allow light to pass through them.
- c) **What is the property of a mirror ?**
To reflect light that falls on it
- d) **What kind of material is a sponge ?**
Softy

11. CROSSWORD PUZZLE

Solve the given puzzle with the help or clues.

Across

- 1. Transparent
- 2. Appearance
- 4. Matter
- 5. Lustre
- 6. Insoluble

Down

- 1. Transparent
- 3. Miscible

Q12.Fun Activity

Liquid density lower