

NCERT QUESTIONS WITH SOLUTION

1.

Column-I		Column-II	
(1)	Matter	(a)	Objects can be seen clearly through it
(2)	Soluble	(b)	Occupies space and has mass
(3)	Transparent	(c)	Shiny surface
(4)	Lustre	(d)	Mixes completely in water

Ans. (1)-(b), (2)-(d), (3)-(a), (4)-(c)

2. The containers which are used to store materials in shops and at home are usually transparent. Give your reasons for this.

Ans. The containers which are used to store materials in shops and at home are usually transparent because keeping the things in transparent jars so it can be seen easily, and customers attracted to see them.

3. State whether the statements given below are True [T] or False [F]. Correct the False statement(s).

(a) Wood is translucent while glass is opaque.

(b) Aluminium foil has lustre while an eraser does not.

(c) Sugar dissolves in water whereas sawdust does not.

(d) An apple is a matter because it occupies no space and has mass.

Ans. (a) [False]

Wood is opaque while glass is transparent.

(b) [True]

(c) [True]

(d) [False]

An apple is a matter because it occupies space and has mass.

4. We see chairs made up of various materials, such as wood, iron, plastic, bamboo, cement and stones.

Following are some desirable properties of materials which can be used to make chairs. Which materials used to make chairs fulfil these properties the most?

(a) Hardness (does not bend or shake on sitting even after long use).

(b) Lightweight (easy to lift or to take from one place to another)

(c) Does not feel very cold when sitting during winters.

(d) Can be cleaned regularly and made to look new even after long use.

Ans. (a) iron, cement and stone

(b) Plastic and bamboo

(c) Wood, bamboo

(d) Cement and stone

5. You need to have containers for collection of (a) food waste, (b) broken glass and (c) wastepaper

Which materials will you choose for containers of these types of waste? What properties of materials do you need to think of?

Ans. Plastic is suitable to store, food waste, broken glass and waste paper. because plastic is non reactive and light in weight and will not break easily.

6. Air is all around us but does not hinder us from seeing each other. Whereas, if a wooden door comes in between, we cannot see each other.

It is because air is _____ and the wooden door is _____.

Choose the most appropriate option:

- (a) transparent, opaque
- (b) translucent, transparent
- (c) opaque, translucent
- (d) transparent, translucent

Ans. transparent, opaque

7. Imagine you have two mysterious materials, X and Y. When you try to press material X, it feels rigid and does not change its shape easily. On the other hand, material Y easily changes its shape when you press it. Now, when you mix both materials in water, only material X dissolves completely. while material Y remains unchanged. What can materials X and Y be? Can you identify whether material X is hard or soft? What about material Y? Justify your answer.

Ans. Material X could be salt or sugar (hard and soluble in water). Material Y could be rubber (soft and insoluble in water). Material X is hard because it does not change shape easily and dissolves in water. Material Y is soft because it changes shape easily and does not dissolve in water.

8. (i) Who am I? Identify me on the basis of the given properties.
(a) I have lustre. _____

- (b) I can be easily compressed. _____
- (c) I am hard and soluble in water _____
- (d) You cannot see clearly through me _____

(e) I have mass and volume but you cannot see me. _____

(ii) Make your own 'Who am I?'

- (a) I am soft and insoluble in water _____
- (b) I am hard and have a shiny surface _____
- (c) I can be easily compressed and I am used for cleaning _____

Ans. (i)

- (a) metal
- (b) sponge
- (c) salt
- (d) Translucent
- (e) Air

(ii)

- (a) Clay
- (b) Metal
- (c) Sponge

9. You are provided with the following materials - vinegar, honey, mustard oil, water, glucose and wheat flour.

Make any two pairs of materials where one material is soluble in the other. Now, make two pairs of materials where one material remains insoluble in the other material.

Ans. Soluble pairs:

Vinegar and water
Glucose and water

Insoluble pairs:

Mustard oil and water
Wheat flour and water