

Sorting Materials into Groups

Test

Time : 30 minutes

Maximum marks : 20

Instructions

- This test contains 20 questions.
- Each question has **FOUR** options (1), (2), (3) and (4). **ONLY ONE** of these four options are correct.
- For each question, marks will be awarded in one of the following categories:
Full Marks : +1 : If only correct answer is given.
Zero Marks : 0 : If no answer is given.
Negative Marks : There is no negative marking.

Multiple choice questions

1. The substance which is insoluble in water is
(1) sodium chloride (2) cane sugar (3) sawdust (4) lemon juice
2. The great variety of things around us is due to
(1) classification (2) diversity (3) proportion (4) complexity
3. Material that is hard, opaque, and has a shining surface when freshly cut is
(1) rubber (2) wood (3) copper (4) plastic
4. Note books are made up of
(1) wood (2) paper (3) plastics (4) cotton
5. A freshly cut surface of which of the following substance has shiny surface?
(1) Wood (2) Chalk (3) Cardboard (4) Aluminium
6. Which one of these items is made up of more than one material?
(1) Pen (2) Mug (3) vest (4) saree
7. Kerosene or edible oil do not dissolve in water They are called-
(1) Immiscible liquids (2) Liquid solvents
(3) Liquid solutes (4) Miscible liquids
8. Which of these can be classified as soft?
(1) cotton (2) sponge ball (3) wax (4) all of these
9. Which one of the following is soluble in water?
(1) shampoo (2) saw dust (3) chalk powder (4) melted wax
10. Example of soft material is
(1) iron (2) plastic (3) sponge (4) wood

- 11.** The liquid substance which do not completely disappear in water after dissolving is said to be
(1) soluble (2) insoluble (3) miscible (4) immiscible
- 12.** How many of the following substances are insoluble in water?
Sand, Chalk, Wood, Salt, Sugar
(1) 1 (2) 2 (3) 3 (4) 4
- 13.** Glass, water, air and some plastics are examples of _____ materials.
(1) translucent (2) transparent (3) opaque (4) None of these
- 14.** Which one of the following is not translucent?
(1) Leather (2) Plastic buckets
(3) Tinted glass window of a car (4) Butter paper
- 15.** Which of the following have lusture?
(1) Gases (2) Graphite (3) Paper (4) Wood
- 16.** From which we can obtain talc?
(1) Diamond (2) Glass (3) Soapstone (4) Aluminium
- 17.** Which of the following is not soluble in water?
(1) Sand (2) Washing soda (3) Sugar (4) Salt
- 18.** The lustrous material is
(1) wood (2) gold (3) paper (4) sulphur
- 19.** A transparent material among the following is
(1) wood (2) glass (3) iron (4) cardboard
- 20.** Vinegar is
(1) soluble in water (2) sinks in water
(3) is insoluble in water (4) floats on water

Answer key

| Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|
| Answer | 3 | 2 | 3 | 2 | 4 | 1 | 1 | 4 | 1 | 3 |
| Question | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Answer | 4 | 3 | 2 | 1 | 2 | 3 | 1 | 2 | 2 | 1 |

Test solutions

1. Option (3)

The substances which dissolve in water are called water-soluble substances Insoluble substances do not dissolve in water Sawdust does not disappear when it is added to an excess of water Therefore, it is insoluble in water

2. Option (2)

The great variety of things around us is due to the diversity in the properties of matter in nature Every matter differs from one another All these differences create diversity

3. Option (3)

Metals usually have shining surfaces Copper is a metal, hard, opaque and has a shining surface

4. Option (2)

Paper is used to make notebooks.

5. Option (4)

Metals are lustrous so Aluminium is having shiny surface.

6. Option (1)

A pen may have a plastic body but it has a nib made up of metal and also ink for writing.

7. Option (1)

Liquids like edible oil or kerosene, which do not mix with water, are said to be immiscible liquids when mixed form separate layers

8. Option (4)

These materials can be easily scratched or compressed.

9. Option (1)

Shampoo easily dissolved in water. This is why it is used for washing hair which are later rinsed with water to remove any shampoo on the scalp or hair. Melted wax will not dissolve in water even on heating. Wax is an organic substance. Wax molecules are also too large to occupy any space between the water molecules.

10. Option (3)

Materials that can be compressed or scratched easily are called soft materials while some other materials which are difficult to compress are called hard materials Cotton, the sponge is soft material and iron is a hard material

11. Option (4)

The liquid substance which do not completely disappear in water after dissolving is said to be immiscible.

12. Option (3)

Sand, chalk and wood are only insoluble in water

13. Option (2)

Glass, water, air and some plastics are examples of transparent materials.

14. Option (1)

Leather is not translucent but opaque in nature. We can partially see through a translucent object as light can pass through it partially.

15. Option (2)

Graphite is shiny non-metal.

16. Option (3)

Talc is obtained from soapstone.

17. Option (1)

Sand is not soluble in water

18. Option (2)

There are many things which shine i.e., they have luster Materials that shine are called lustrous Here, gold is the only substance that is lustrous

19. Option (2)

Those substances or materials, through which objects can be seen are called transparent Since we can see materials kept behind glass, it is a transparent material Opaque material do not allow light to pass through them

20. Option (1)

When water is added to vinegar, it disappears Therefore, vinegar is soluble in water