

Board – CBSE

Class –6

Topic-Sorting materials into groups

1. Sam found a bag containing the following materials

- (i) mirror
- (ii) Paper stained with oil
- (iii) wood
- (iv) Glass spectacles

Which is/are these materials are opaque.

- (a) (i) only
- (b) (iv) only
- (c) (i) and (iii)
- (d) (ii) and (iv)

Answer

(c)

2. **Fill in the blanks**

- (a) Materials that do not allow light to pass through them are called ____.
- (b) Metals have a shiny appearance called ____.
- (c) Materials which can be pressed easily are called ____ materials.
- (d) Copper and gold are _____
- (e) Dried leaves fallen on the surface of a pond ____ in the pond
- (f) ____ and _____ dissolves in water

Answer

- (a) opaque
- (b) lustre
- (c) soft
- (d) Metals
- (e) floats
- (f) Oxygen and Carbon-dioxide

3. **State whether the statements given below are True or False.**

- (i) Wood is opaque, while glass is transparent .
- (ii) Materials are grouped for convenience ,study their properties and their uses
- (iii) Hydrogen dissolves in water.
- (iv) A piece of wood floats on water.
- (v) All gases dissolve in water.
- (vi) Oil mixes with water.
- (vii) Sand settles down in water.
- (viii) Nitrogen dissolves in water.
- (ix) Salt is soluble in water while sand is not.
- (x) cooked rice is a soft material

Answer

- (i) True
- (ii) True
- (iii) False
- (iv) True
- (v) False
- (vi) False
- (vii) True
- (viii) False
- (ix) True
- (x) True

4. **Why metals often lose their shine and appear dull?**

Ans. Metals often lose their shine and appear dull because of action of air and moisture on them.

5. **Select those objects from the following which shine:**

Glass bowl, plastic toy, steel spoon, cotton shirt

Ans. Glass bowl and steel spoon are shining objects.

6. **List all the items known to you that float on water. Check and see if they will float on**

an oil or kerosene.

Ans. (A) List of some items that float on water:

1. Paper
2. Wood
3. Thin plastic sheets
4. Wax
5. Ice
6. Thermocol
7. Oil

(B) List of items that float on an oil:

1. Paper
2. Plastic sheet
3. Wax
4. Thermocol
5. Wood

(C) List of items that float on kerosene:

1. Paper
 2. Thermocol
 3. Thin plastic sheet
7. **Which material is generally used for making pens? Wood, aluminium, plastic, cotton**

Ans: Plastic or metal.

8. **Is oil soluble in water?**

Ans: Oil does not dissolve in water, so it is insoluble in water but floats on the surface of water.

9. **List three liquids which are transparent.**

Ans. Water, alcohol and Acetone/Benzene.

10. **Write any four properties of materials.**

Ans:

- (a) Appearance
- (b) Hardness
- (c) Solubility
- (d) Float or sink in water
- (e) Transparency

11. How do aquatic plants and animals survive in water?

Ans: Aquatic plants and animals survive in water as Oxygen and Carbon dioxide dissolves in water. Dissolved oxygen is available for animal and plants for respiration and survival.

12. Why is water important for our body?

Ans: Water can dissolve a large number of substances, so it is needed by the body. It is also major part of our body cells.

13. Metals have lustre (shine). Give reason why some metal articles become dull and loose their shine.

Ans: Metals when exposed to air react with moisture and gases present in it, thereby forming a dull layer of some other compound on it.

14. Why is water called a universal solvent?

Ans: Water dissolves a large number of substances in it, so it is called universal solvent.

15. Write an experiment to show that our palm is translucent.

Ans: Cover the glass of a torch with your palm at a dark place. Switch on the torch and observe from the other side of palm. We see that the light of torch passes through palm but not clearly. This experiment shows that our palm becomes translucent when a strong beam of light passes through it.

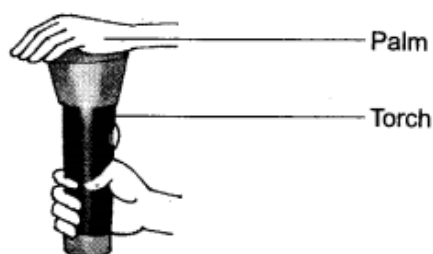


Fig. 4.4 Experiment to show that our palm becomes translucent when light is passed.