

WORKSHEET

CLASS- VI

SUBJECT- Science

CHAPTER-3 Nature of Matter

A. Fill in the blanks.

1. _____ materials allow light to pass through them.
2. Fragrance of agarbatti can reach another corner of the room through _____.
3. _____ substances dissolve in water, for example _____.
4. _____ of a gas decreases with _____ in temperature.
5. Gases _____ into each other readily.

B. Write true or false.

1. All substances dissolve in water always. _____.
2. Blackboard is an opaque object. _____.
3. Iron nails can float in a bucket full of water. _____.
4. Hydrogen is slightly soluble in water. _____.
5. Glass is a transparent material. _____.

C. Match the following.

- | | |
|--------------|--------------------|
| 1. Pebbles. | Man-made material |
| 2. Oxygen. | Insoluble in water |
| 3. Plastic | Classification |
| 4. Grouping. | Sink |
| 5. Mustard | Dissolves in water |

D. Answer the following in brief.

1. Name any two materials which are i) natural ii) man-made
2. Define the terms a) solubility and b) diffusion with the help of examples.
3. Make a list of opaque and transparent materials present in your home.
4. How can the scent of a perfume spread in each corner of our home? Explain.
5. What is meant by a saturated solution?

E. Answer the following.

1. Differentiate between
 - a) Transparent and opaque materials
 - b) Soluble and insoluble materials
2. What is the effect of increase of temperature on solubility of substances?
3. Explain properties of the three states of matter giving examples of each.
4. Liquids have no fixed shape, only a fixed volume. Explain with an activity.
5. How are underwater animals able to survive?

F. Pick the correct option.

1. Gas which cannot dissolve in water
 - a. Hydrogen
 - b. Helium
 - c. Oxygen
 - d. Both a & b
2. Which out of these can float in a tub of water?
 - a. Plastic
 - b. Spoon
 - c. Flower petals
 - d. Marbles
3. Solubility of a gas —— with increase in its temperature.
 - a. Increases
 - b. Decreases
 - c. Remains the same
 - d. None of above
4. Which of these are insoluble in water ?
 - a. Kerosene
 - b. Mustard oil
 - c. Ghee
 - d. All of these
5. Amount of sugar dissolved in water which is hot is
 - a. Less
 - b. More
 - c. Same
 - d. No effect of temperature
6. Which of the following is insoluble in water?
 - a. Sand
 - b. Sugar
 - c. Salt
 - d. None of these
7. Liquids have
 - a. Fixed shape and volume both
 - b. Only fixed volume
 - c. Neither fixed volume nor shape
 - d. None of above
8. Matter shows the following properties
 - a. Sinks in water
 - b. Occupies only space
 - c. Occupies space and has mass
 - d. Both a & b
9. Which of these is a transparent material?
 - a. Wood
 - b. Glass
 - c. Bricks
 - d. Thick plastic
10. Diffusion does not happen in the following.

- a. Solids
- b. Liquids
- c. Gases
- d. All of these

G. Let's do a Science experiment.

Collect materials available daily in your home and check whether they will sink or float in water .