

CHAPTER-1 | Matter in Our Surroundings

QUIZ
PART-02

1. Which state of matter has a definite shape and fixed volume?
A. Solid
B. Liquid
C. Gas
D. Plasma (A)

Explanation: Solids have a definite shape and a fixed volume.

2. Which state of matter has fixed volume but no definite shape?
A. Solid
B. Liquid
C. Gas
D. Sponge (B)

Explanation: Liquids have fixed volume but take the shape of the container.

3. Which state of matter has neither definite shape nor fixed volume?
A. Solid
B. Liquid
C. Gas
D. Crystal (C)

Explanation: Gases have no definite shape and no fixed volume.

4. Which state of matter is highly compressible?
A. Solid
B. Liquid
C. Gas
D. Sugar (C)

Explanation: Gases are highly compressible compared to solids and liquids.

5. In which state is the rate of diffusion the least?
A. Solid
B. Liquid
C. Gas
D. Plasma (A)

Explanation: Solids have the least rate of diffusion because their particles are tightly packed.

6. Inter-particle force is highest in:
A. Gas
B. Liquid
C. Solid
D. Air (C)

Explanation: Solids have the strongest inter-particle force among the three common states.

7. Why can a sponge be compressed?
A. It is a liquid
B. It has large crystals
C. It has air trapped in minute holes
D. Its particles are gases only (C)

Explanation: A sponge can be compressed because air trapped in its tiny holes is expelled on pressing.

8. The particles of gases move:
A. Very slowly and regularly
B. Randomly at high speed
C. Only downward
D. Without motion (B)

Explanation: Gas particles move randomly and very fast.

9. Gas pressure is caused because gas particles:
A. Dissolve in air
B. Become liquids
C. Hit each other and the walls of the container
D. Stop moving (C)

Explanation: Gas pressure is produced by collisions of gas particles with the container walls.

10. Which of the following has the highest density?
A. Exhaust from chimneys
B. Chalk
C. Copper wire
D. Honey (C)

Explanation: Copper wire has the highest density among the given options.