

CBSE TEST PAPER

CLASS - IX Science (Matter in our surrounding)

NOTE- Q 1 to 15 carries 2 marks each and Q 16 to 25 carries 3 marks each

- Q.1 Some substances cannot exist in the gaseous state, other cannot exist in the liquid state, and some cannot exist either in the gaseous or the liquid state. Giving suitable examples. Justify the above statement?
- Q.2 A student spilled a bottle of ammonia in one corner of the laboratory. Soon the whole laboratory was filled with pungent irritating smell. The students immediately opened the windows and doors and switched on the exhaust fans. After sometime, student got relief. Explain what did actually happen?
- Q.3 Carbon dioxide which is a gas under normal conditions of temperature and pressure can be liquefied by compressing it to 70 atm at ordinary temperature. What happens when pressure is suddenly released?
- Q.4 What is the difference between a gas and a vapour?
- Q.5 Ordinary water boils at 100 degree Celsius. Can it be made to boil at 95 degree Celsius or 105 degree Celsius?
- Q.6 Which state of matter is characterized by the following properties:
- A substance with a fixed arrangement of particles.
 - A substance that has large distances between the particles.
- Q.7 "On blowing air into a balloon, It inflates." Explain Why
- Q.8 why do we call sponge a solid even it is easily compressible?
- Q.9 Arrange the particles of the three states of matter:-
- In order of increasing randomness.
 - Decreasing order of inter particle distances.
- Q.10 Even 2-3 cups of potassium permanganate can impart colour to a large volume of water which characteristic property of particles of matter is illustrated by this observation?
- Q.11 What are the two factors responsible for interconversion of matter?
- Q.12 How boiling is different from evaporation. Give 2 points.
- Q.13 What is diffusion? What are the factors on which rate of diffusion depends.
- Q.14 When a liquid boils, its temperature remains the same, so where does the heat go?

Q.15 Give Reason.

- a) Camphor disappears with time without leaving any solid.
- b) On a hot sunny day, people sprinkle water on the ground.

Q.16 (a) Name the state of matter in which

- 1) Layers of particles can slip and slide over each other
- 2) Particles just more around randomly, because of very weak force of attraction.

(b) List two ways by which a gas can be converted into a liquid.

Q.17 Explain any three factors which affect the rate of evaporation.

Q.18 Give reason:-

- a) Rubber band is a solid but it can change its shape on stretching.
- b) Sponge is a solid yet we are able to compress it
- c) Clothes dry faster on a windy day.

Q.19 After rains, wet roads dry quickly. Why ?

Q.20 How does perspiration or sweating help in keeping our body cool on a hot day ?

Q.21 Define the terms –

- a) Latent heat of Fusion
- b) Latent heat of vaporization
- c) m.p. & b.p.

Q.22 Why clothes dry faster when we spread them out.

Q.23 Equal amount of water and alcohol are separately placed in two identical dish . Which will evaporate faster – water or alcohol Why?

Q-24 Differentiate between solids, liquids and gases on the bases of-

Density b) compressibility c) K.E d) Shape and volume e) intermolecular forces f) Fluidity

Q25 In a hot summer day. Piranha and Asha are wearing cotton and nylon clothes respectively . Who would be more comfortable & why?