



MASTER TUTORIALS

Topic Name: Matter in Our Surrounding (Subjective Paper)

1. Name the physical state of matter which can be easily compressed ?
2. Which of the following are matter? Chair, Air, Love, Smell, Hate, Almonds, Thought, cold-drink, smell of perfume?
3. A substance has a definite volume but no definite shape state whether this substance is a solid a liquid or a gas.
4. What is sublimation?
5. What are the characteristics of the particles of matter?
6. Will increase or decrease of pressure help to liquefy a gas?
7. Define :- (a) Boiling point (b) Melting point
8. Define:- (a) Latent heat of fusion (b) Latent heat of vaporisation.
9. Give reasons-
(a) A gas fills completely the vessel in which it is kept.
(b) A gas exerts pressure on the walls of the container.
10. What is plasma?
11. What are full forms of CNG and LPG? And write their uses?
12. Change the following celsius temperature to kelvin scale –
(i) -273°C (ii) -100°C (iii) -40°C (iv) $+30^{\circ}\text{C}$
13. Convert (a) 300 K (b) 573 K into celsius scale-
14. Why does our palm feel cold, when we put some acetone petrol as perfume on it ?
15. Have you ever thought how do aquatic plants and animals survive ? from where do they get oxygen ?
16. The mass per unit volume of a substance is called density (density = mass /volume). Arrange the following in order of increasing density – air , exhaust from chimneys, honey, water, chalk, cotton and iron.
17. Convert the temperature of 300 K to the Celsius scale.
18. Convert the temperature of 25°C to the kelvin scale.
19. Convert the temperature of 373°C to the kelvin scale.
20. Name the three states of water.
21. Which state of matter has neither definite shape nor volume?
22. If the fish is being fried in a neighbouring home, we can smell it sitting in our own home. Name the process which brings this smell to us
23. What is the common name of solid carbon dioxide?
24. What is the chemical name of dry ice?
25. Name the physical state of matter
(A) Which can be easily compressed
(B) Which is most rigid
(C) Which can flow but cannot fill the vessel completely.
26. Name two substance which can sublime?
27. Name the process for the following changes:
(1) Liquid \longrightarrow Solid
(2) Solid \longrightarrow Gas
(3) Gas \longrightarrow Liquid
28. Which will have more density : ice or steam?
29. Out of solids and liquids which will have greater movement of molecules.
30. Will increase of surface area increase or decrease rate of evaporation?
31. Will increase or decrease of pressure help to liquefy a gas?
32. What is the general name of fluid forms of matter?
33. Give two reasons for saying that wood is a solid.
34. Which diffuses faster : a liquid or a gas?
35. Convert the following temperature to Celsius scale:
(1) 323 K (2) 600 K
36. Two liquids A and B have boiling points 350 K and 375 K respectively. Which of the two has greater intermolecular forces of attraction.
37. In which physical state water exists at
(1) 100°C (2) 0°C
38. The boiling point of water is 100°C . Express this in SI units (Kelvin scale).
39. The kelvin temperature is 270 K. What is the corresponding Celsius scale temperature?
40. Solids are generally very heavy while gases are light. Explain.
41. What is common in the three states of matter ?
42. A certain substance 'A' can be compressed to very less extent, but takes up the shape of any container in which it is placed. What will be its physical state ?
43. Discuss the significance of the boiling point of liquid.
44. Name one property which is shown by naphthalene and not by sodium chloride.
45. Are the melting point of solid and the freezing point of liquid same or different.
46. The melting point of a substance is just below the room temperature. Predict its physical state.