

**Chemistry**  
**Chapter 1: Class IX**  
**Assignment**

Multiple choice questions:

1. LPG is used in the kitchens in our homes in the-  
a. Solid form      b. Compressed form      c. Gaseous form      d. None.
2. Which of the following is not fluid?  
a. Water      b. Air      c. Sand      d. Sharbat
3. A state of matter which does not have a definite shape but has definite volume?  
a. Solid      b. Liquid      c. Gas      d. None of these.
4. A state of matter which neither has neither definite shape nor definite volume?  
a. Solid      b. Liquid      c. Gas      d. None of these.
5. The density of water is \_\_\_\_\_ than that of ice.  
a. More      b. Less      c. Equal to      d. None.
6. The compressibility of which state of matter is high?  
a. Solid      b. Liquid      c. Gas      d. All of these.
7. Which of the following is the simplest form of matter?  
a. Element      b. Mixture      c. Compound      d. None of these.
8. Which of them is most energetic?  
a. Solids      b. Liquids      c. Gases      d. All of them.
9. Which of the following cannot be considered as matter?  
a. Mixture      b. Affection      c. Gas      d. Liquid.
10. Which of the following is correct for something to be called matter?  
a. It occupies space      b. It has mass      c. Both (a) and (b)      d. None of these.
11. On Kelvin scale  $0^{\circ}\text{C}$  is equal to:  
a. 273 K      b. -273 K      c. 0 K      d. 100K
12. SI unit of temperature is:  
a. Kelvin      b. Celsius      c. Fahrenheit      d. Pascal
13. Dry ice means?  
a. Solid  $\text{SO}_2$       b. Solid water      c. Solid  $\text{CO}_2$       d. Solid CO
14. Condensation is a process which involves conversion of :  
a. Solid into liquid      b. Liquid into vapour      c. Vapour into liquid      d. Liquid into solid
15. During evaporation, the particles of liquid evaporate from?  
a. The bulk of liquid      b. Surface only      c. The surface and bulk of liquid      d. None of them.
16. Which of the following will not sublime?  
a. Camphor      b. Ammonium chloride      c. Bromine      d. Iodine
17. The temperature at which the solid melts to become a liquid at the atmospheric pressure is called:  
a. Boiling point      b. Melting point      c. Freezing point      d. None of these.
18. The temperature at which the vapour pressure of the liquid becomes equal to the atmospheric pressure is called?  
a. Boiling point      b. Melting point      c. Freezing point      d. None of these.
19. Which of the following statements is not correct?

- a. The density of ice is less than the density of water.
  - b. To convert a temperature on the Kelvin scale to Celsius scale, subtract 273 from the given temperature.
  - c. To convert a temperature on the Celsius scale to Kelvin scale, add 273 to the given temperature.
  - d. Vaporization of a liquid causes cooling.
20. When a substance is directly changed from solid state to gas on heating or from gas to solid on cooling, this process is called?
- a. Evaporation
  - b. Condensation
  - c. Sublimation
  - d. Vaporization

### Very Short Answer questions:

1. What are the characteristics of particles of matter?
2. A sponge can be pressed easily; still it is called a solid. Why?
3. Solids are denser as compared to liquids, still ice floats on water. Explain
4. In which state of matter there will be maximum force of attraction between particles?
5. Write the full form of L.P.G. & C.N.G.
6. What is the unit of measurement of volume?
7. Arrange the following substances in increasing order of forces of attraction between the particles— water, sugar, oxygen?
8. A certain substance 'A' cannot be compressed but takes up the shape of any container in which it is placed. What is the physical state of 'A'?
9. A rubber band changes its shape when stretched. Can it be regarded as solid?
10. Is matter continuous or particulate?
11. Define Latent heat of fusion.
12. Why does water vapour has more energy than water at same temperature?
13. How can gases be liquefied?
14. Why does a desert cooler cool better on a hot, dry day?
15. Why does temperature remain constant during the boiling of water even though heat is supplied continuously?
16. What is the chemical name of Dry Ice? Why is it called dry ice?
17. In which unit pressure is measured?
18. Convert the  $573^{\circ}\text{K}$  temperatures to the Celsius scale.
19. What is the physical state of water at  $25^{\circ}\text{C}$ ?
20. What produces more severe burns, boiling water or steam and why?

### Short Answer questions:

1. Differentiate solids liquids and gases on the basis of (a) diffusion (b) density.
2. Why do solids generally lack the property of diffusion?
3. How will you demonstrate that air contains water vapour?
4. The smell of hot sizzling food reaches you several meters away, but to get the smell from cold food you have to go close. Give reason.
5. A diver is able to cut through water in a swimming pool. Which property of matter does this observation prove?

6. List four factors which affect the rate of evaporation.
7. What are the Characteristics of Particles of Matter?
8. Why do we sweat on a humid day?
9. Can matter change its state? State the conditions under which it changes.
10. Why do we say that evaporation is a surface phenomenon?

Long Answer questions:

1. Differentiate between solid, liquid & gas.
2. Prove with the help of examples the following properties of particles
  - a) Particles have spaces between them.
  - b) Particles are held together by strong attractive forces.
3. Convert the following into Kelvin Scale.
  - a)  $5^{\circ}\text{C}$
  - b)  $10^{\circ}\text{F}$
  - c)  $200^{\circ}\text{C}$
  - d)  $43^{\circ}\text{F}$
  - e)  $62^{\circ}\text{C}$
4. Differentiate between Evaporation & boiling
5. Explain with the help of examples that Evaporation causes cooling.
6. Discuss the factors which effect evaporation.