

Chemistry Worksheet Grade IX  
Matter in our Surroundings

1. What is the relation between  $^{\circ}\text{C}$  and K?
2. Change the following Celsius temperatures to kelvin Scale  
 $-273^{\circ}\text{C}$ ,  $-100^{\circ}\text{C}$ ,  $-40^{\circ}\text{C}$ ,  $30^{\circ}\text{C}$
3. Write the name of 3 substance that sublime
4. Explain how the following factors affect the rate of evaporation of a liquid
  - a. temperature
  - b. moisture in the surrounding air
5. What determine the state of a substance'?
6. Give two similarities of evaporation and boiling
7. Give reason:-
  - a. Temperature of a liquid does not change when it boils
  - b. Doctors advised to put strips of wet clothes on the forehead of a person having high temperature.
  - c. A liquid generally flows easily.
8. How are gases liquefied?
9. Carbon dioxide was taken in an enclosed cylinder and compressed by applying pressure
  - a. Which state of matter will we obtain after completing the process
  - b. Name and define the process
  - c. What is the common name of the product obtained in the above process.
10. Why does the temperature of a substance remain constant during its melting point or boiling point?
11. The melting point of three solids are 298K, 314k and 398K resp. Arrange them in increasing order of their inter particle distance?
12. Why does the level of water does not change when salt dissolved in water?
13. Suggest an activity to show that the rate of diffusion of liquids decreases with increase in density of the liquid.
14. Why latent heat of vaporization is is higher than the latent heal of fusion?
15. Why do people sprinkle water on roof during hot summer days?
16. Evaporation causes cooling explain the reason for this effect?
17. Give any 3 difference between boiling and evaporation?
18. Give two ways in which melting point and boiling points can be useful'?
19. Can a rubber band change its shape on stretching? Is it solid? justify
20. Give suitable reason for the following- Sugar crystals dissolve faster in hot water than cold water.
21. Why do gases exert more pressure on the walls of the container than the solids?
22. Why is ice at 273k more effective in cooling than water at the same temperature'?
23. What causes more severe burns- boiling water or steam'?

24. How does the water kept in an earthen pot become cool during summer?

25. Define Rigidity, Kinetic energy, density

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