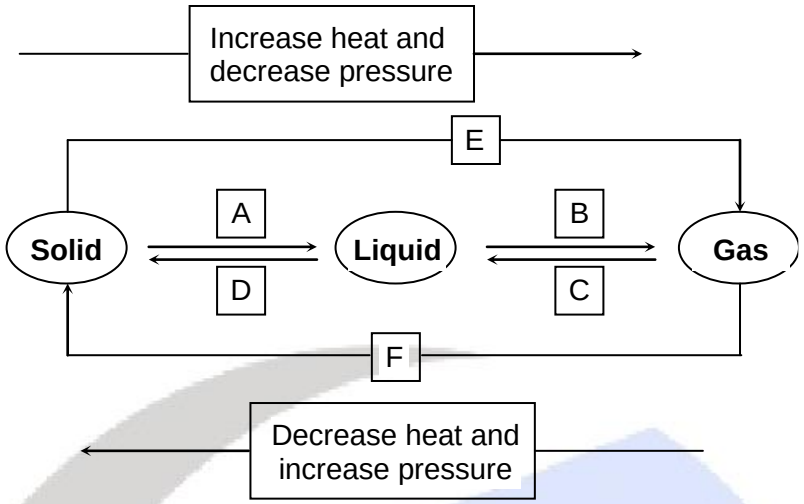
1. Kitchen salt (NaCl) when added to water, gets evenly distributed in it. Which characteristic of particles of matter is exhibited by this ?
2. Define diffusion, is it faster in winter or summer season ?
3. When we light an incense stick (agarbatti) in a corner of our room, why does its fragrance spread in the whole room very quickly ?
4. Give reasons for the following observations. The smell of hot sizzling food reaches when you are several meters away, but to get smell from the cold food, you have to go close to it ?
5. What is the general name of :
   (a) rigid form of matter ?
   (b) fluid forms of matter ?
6. Which diffuses faster : a liquid or a gas ?
7. We can get the smell of perfume sitting several metres away, comment.
8. Arrange the following substances in increasing order of forces of attraction between particles – water, sugar, oxygen.
9. Give two reasons to justify :
   (a) Water at room temperature is a liquid
   (b) An iron almirah is a solid at room temperature.
10. The mass per unit volume of a substance is called density. Arrange the following in order of increasing density:

    air, exhaust from chimneys, honey, water, chalk, cotton and iron. Explain
11. Comment upon the following – Rigidity, compressibility, fluidity, kinetic energy and density.
12. Give Reasons :
    (a) A gas completely fills the vessel in which it is kept?
    (b) A gas exerts pressure on the walls of the container?
    (c) A wooden table should be called a solid.
    (d) We can easily move our hand in air but to do the same through a solid block of wood, we need a karate expert.
13. Liquids generally have lower density as compared to solids. But you must have observed that ice floats on water. Find out why?
14. Convert the following temperature to Celsius scale :
    (a) 300 K (b) 573 K
15. What is the physical state of water at:
    (a) 25^0C (b) 0^0C (c) 100^0C ?
16. For any substance, why does the temperature remain constant during the change of state?
17. Suggest a method to liquify the atmospheric gases.
18. The Naphthalene balls disappear with time without leaving any solid. Give reason.
19. Why is ice at 273K more effective in cooling than water at the same temperature?
20. What produces more severe burns, boiling water or steam ?

21. Name A, B, C, D, E and F in the following diagram showing change in its state :



22. Why does a desert cooler cool better on a hot dry day ?

23. How does the water kept in an earthen pot (matka) become cool during summer?

24. Why are we able to sip hot tea or milk faster from a saucer rather than a cup ?

25. What type of clothes should we wear in summer?