**KIIT WORLD SCHOOL**

**CLASS IX Science ASSIGNMENT 1- MATTER IN OUR SURROUNDINGS**

**DATE OF GIVING: DATE OF SUBMISSION:**

1. Which is not a matter:
2. Sugar b) bread c) cold d) LPG
3. Particles of matter:
4. Have forces of attraction between them b) are very -very tiny and move continuously

 c) have spaces between them d) all the above

1. Boiling point of a substance is below room temperature, at room temperature, ii is:
2. Solid b) liquid c) gas d) all of the above
3. Boiling point of water is:
4. 273 K b) 100 K c) 0oC d) 373 K
5. Fluids are:
6. Solids and liquids b) liquids and gases c) gases and solids d) all the above
7. Changing of a solid into liquid is called:
8. Sublimation b) vaporization c) condensation d) fusion
9. Dry ice is:
10. Ice without water b) ice at high temperature c) solid carbon monoxide d) solid CO2
11. The boiling points of three liquids A, B and C are 47oC, 70oC and 127oC respectively. In Kelvin scale the correct sequence of temperature will be:
12. 310K, 343K, 400K b) 320K, 343K, 410K c) 320K, 343K, 400K d) 310K, 333K, 400K
13. Four students A, B, C and D visited a Natural Gas Compressing unit and observed the specific conditions of temperature and pressure for the liquefaction of natural gas. They told the following statements about the conditions required for the liquefaction of gas. Which is correct?
14. Temperature and pressure should be low.
15. Temperature and pressure should be high
16. Temperature should be high and pressure should be low.
17. Temperature should be low and pressure should be high.
18. Which of the following sets of phenomenon will increase on increasing temperature?
19. compression, diffusion, evaporation
20. evaporation, solubility, compression of gases
21. compression of gases, solubility, diffusion, evaporation
22. diffusion, solubility, evaporation

KNOWLEDGE

1. What is evaporation? Why it causes cooling? Illustrate with two examples.
2. Name the gases used in compressed form :
3. As Fuels b) in hospitals
4. Convert into Celsius: a) 298 K b) 13 K c) 600 K

UNDERSTANDING

1. Why are solids rigid, but liquids and gases are fluids? Explain by citing examples.
2. Why do we feel cold, when our body is wet and we stand under a running fan?
3. With the help of an activity explain the various factors which affect the rate of evaporation
4. Mention the applications of dissolved gases.
5. How will you explain the following characteristics of particles of matter, with the help of activity:
6. particles of matter have forces of attraction between them
7. Particles of matter are continuously moving.

APPLICATION/ ANALYSIS

1. Differentiate between solids, liquids and gases with respect to their: i) shape ii) kinetic energy

iii) compressibility

1. Enlist four differences between evaporation and boiling.
2. If crushed ice is heated in a beaker, till it boils, what type of temperature- time graph would you obtain? Label the parts of the graph which represent: a) melting b) boiling

SYNTHESIS/ EVALUATION

1. You want to put on your favourite shirt to a party, but it is still wet after wash. What would you do to dry it fast?
2. On a hot summer day, Manoj is wearing loose cotton clothes and Shreyas tight nylon clothes. In your opinion who will be more comfortable and why?

Value based questions:

1. ‘The particles of matter are continuously moving.’ Cite an example to justify. What value do you learn from this?
2. Water takes the shape of the container in which it is kept. Why? Which values do you learn from this property of water?
3. Sunita while determining the boiling point of water saw that the thermometer reading becomes constant at 100oC. She got confused and inquired her teacher about the same.
4. Why was the temperature constant?
5. How can you imply the same in your daily life? What values does Sunita exhibit?
6. People in villages use earthen pots to store water. Why? Which value does it teach us?

Reflective thinking:

1. Ice, water and steam are different states of same chemical compound. In what respects do these differ? ( 5 points)
2. People sprinkle water on streets and roof tops in summers. Explain why?
3. A boy tried very hard to break the stream of water coming from a water tap with his fingers but he could not. To which characteristic of particles of matter can you relate it to? Can this characteristic be related to your general life?