

GIRLS' HIGH SCHOOL & COLLEGE, PRAYAGRAJ

WORKSHEET – 2

SESSION – 2020-21

CLASS – 8 A, B, C, D & E

SUBJECT – CHEMISTRY

Note – Parents are expected to ensure that the student takes reference from a book or internet and thereafter answers the following questions.

Website- <https://youtu.be/ENVKQVIDNLY>

Chapter 1- MATTER

Topic – Interconversion of states of matter

SOLID – LIQUID INTERCONVERSION

1. Solid to liquid- On heating a solid the kinetic energy of the particles increases, thus they move away from their positions at a particular temperature called the melting point of the solid. Thus a solid becomes a liquid.

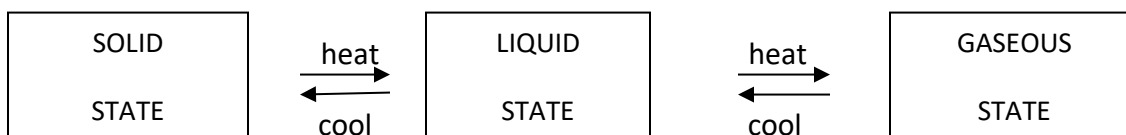
2. Liquid to solid- On cooling a liquid, the kinetic energy decreases, thus the particles move shorter distances and get rigidly fixed and vibrate about their fixed positions. This temperature is called the freezing point. Thus a liquid becomes a solid.

LIQUID-GAS (VAPOUR) INTERCONVERSION

1. Liquid to gas- On heating a liquid, the kinetic energy of the particles increases and the particles collide more strongly. This leads to faster evaporation of the liquid. Thus the liquid is transformed into a gas.

2. Gas(vapour) to liquid- On cooling a gas, the kinetic energy of the particles is lowered, they collide with each other and condense to form a liquid.

Water boils at 100⁰C and freezes at 0⁰C. Ethanol boils at 78⁰C. The conditions of change of state differ from substance to substance.



Answer the following questions-

Q1. Fill in the blanks-

- a) Evaporation of a liquid is faster at _____ temperatures. (higher/lower)
- b) The particles comprising matter possess _____ energy. (potential/kinetic)
- c) A gas on _____ is transformed into a liquid. (heating/cooling)

Q2. State true or false-

- a) A liquid does not evaporate below its boiling point.
- b) The particles in a liquid vibrate about their mean position.
- c) A liquid which boils at 78°C is ethanol.

Q3. Define the following-

- a) Melting point of a solid
- b) Freezing point of a liquid

Q4. What will happen to the kinetic energy of a particle if it is heated?

Q5. Explain the liquefaction of a gas on the basis of kinetic theory.

[THE END]