HW

B. 1→ Anything which occupies space and has mass is called matter. Matter is composed of tiny particles called Molecules.

2→ There are three states of matter that are

i) Solid
ii) Liquid
iii) Gaseous

		Solid	Liquid	Gases
i)	Volume	They have a definite volume	They have a definite volume	They do not have a definite volume
ii)	shape	They have a definite shape.	They have no definite shape.	They do not have a definite shape

3→

S.No		Solid	Liquid	gases
(a)	Arrangment of Molecules	Closely packed	Loosely packed	very loosely packed
b)	Intermolecular separation	Less	Maximum	Maximum
c)	Intermolecular force	More	Least	very less
d)	Kinetic energy of molecules	Less	Maximum	Maximum

4→ The change of liquid into its vapour at all temprature from its surface is called evaporation. The intermolecular spaces in liquids are more and the molecular forces of attraction is less which makes them move throughout the liquid. They cannot escape the surface of liquids because of less kinetic energy, when heated they acquire sufficient kinetic energy and they overcome the attractive forces of other molecules on escaping the molecules from the vapour of the liquid

5→ No not all molecules of liquid do not take part in evaporation those molecules which acquire sufficient kinetic energy escape the surface by overcoming forces of attraction of other molecules. This continues till all the liquid evaporates.

6→ When the molecules liquid collide

with each other to acquire
collide energy with each other to
acquire kinetic energy and to
overcome the attractive
forces of other molecules and
change into vapour. The particles of
water of the surface absorb
heat from the surrounding s and cha
into vapours.

7 → Evaporation is the change of
liquid into vapours at all tempe
tures from the surface. It take
place at surface as molecules whi
are at surface and gain sufficie
kinetic energy from the surroundi
above to overcome attractive force

8 → To change liquid into vapours
heat is needed which is taken
from surrounding and temperatur
of the container or body itself
falls and cooling is produced.

9 → a → The factors that decide the rate of
evaporation are:

- Temperature
- Surface area exposed
- Partial pressure of liquid in the air above

When air is blown above the surface of liquid It will take away the liquid carring air particles from the air above the liquid. resulting in decrease in humidity and increase in rate of evaporation.

b→ The factors that decide the rate of evaporation are
- temprature
- surface area exposed
- Partial pressure of liquid in the air above it.

On Increasing the surface area. the no. of molecule, in contact at the surface of liquid increases and evaporation takes place rapidly

c→ The factors that decide the rate of evaporationare
- Temprature
- Surface area exposed
- Partial pressure of liquid in the air above it.
- The Increase in temprature increases

the kinetic energy of the molecules to escape the force of attraction of molecules and evaporate faster.

10-) The change of liquid to vapour on heating at a constant temperature is called boiling. The kinetic energy of molecules determines the molecular motion on heating. The kinetic energy of molecules liquid increase. These molecules start moving more rapidly and away from each other thus converting from liquid to gas.