

STD-VI PHYSICS Assignments (Solved Q.6-11) On Chapter Matter .

Note: Learn and Write these questions and answers in the notebook in a neat and clean way with proper margins and date.

Q6. Give the reason why dissolving 20gm of salt in 100ml of water we see that the level of water does not change.

The reason behind the not increased level in water is just because of the particles of salt occupy the spaces between the particles of water when the 20gm salt is dissolved in 100ml of water.

Q7. What do you mean why Cohesion and Adhesion Forces.

Cohesion Force- The force of attraction between the molecules of similar kind is called force of cohesion. Example- forces between the water molecules which binds the molecules together.

Adhesion Force- The force of attraction between the different types of molecules is called Adhesion. Example- When the glass filled with water is emptied , some water particles remain stuck in the glass due to adhesion between glass and water molecules.

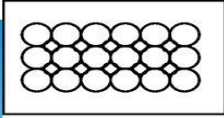
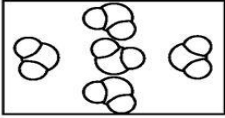

**Q8. How do Solid/Liquid/Gas differ in their following properties:
size/shape/density/compressibility/fluidity/rigidity/expansion on heating.**

Properties	Solid	Liquid	Gas
Size	- Have a definite size,	Indefinite size,	Indefinite size.
Shape	- Have a definite shape,	Indefinite shape,	Indefinite shape.
Density	- Highly dense,	Less denser than solids,	Less denser than liquids and solids.
Compressibility	- Not Compressible,	Negligibly Compressible,	Highly Compressible.
Fluidity	- Not Possible,	Can flow ,	Can flow.
Rigidity	- highly rigid,	Less rigid ,	Not rigid.
Expansion	- Low,	More than solids,	more than Liquids.

Q9. What Type of path the molecules follow in a substance in motion?

The particles in a substance are not at rest (in motion) and they move randomly in all possible directions in a zigzag path.

Q10. State and draw the molecular arrangements of states of matter.

	 solid	 liquid	 gas
Nanoscopic	Molecules are very close together and densely packed	Molecules are closer together but still very separated	Molecules are very far apart
Shape	Will form its own shape and be rigid or fixed	Will take the shape of the container	Will take the shape of the container
Volume	Has a constant volume independent of the size of the container	Has a constant volume independent of the size of the container	Takes the volume of the container
Particle motion	Local vibration in a fixed position, no long-range motion	Random motion throughout the container	Random motion throughout the container

Q11. What do you mean by the change of state of matter? Explain the change of solid into its liquid or liquid changing into its gaseous form at certain temperature.

The change of state of matter where a solid is changing into its liquid form or a liquid is changing into its gas form at a certain temperature, process are involved such as:

Melting (Fusion)- When the solid is changing into its liquid form at a certain temperature the molecules of the solid start moving from its mean position which lets it to flow, thus changing into its liquid form, where the process is melting and heat is absorbed. Example: 0°C the Melting of Ice occurs.

Boiling (Vaporization)- When the Liquid is changing into its gaseous form at a certain temperature the molecules of the liquid start moving rapidly from its mean position which lets it to flow randomly, thus changing into its gaseous form, where the process is boiling and heat is absorbed. example:- Water converting into steam at 100°C when it is boiled.