

Exercise 11

Q.1) Ans) The smallest particle from which a matter is made up is atom.

Q.2) Ans) Molecules are the smallest unit of matter. They exhibit all the properties of that kind of matter and is capable of independent existence.

Q.3) Ans) Atoms may or may not have independent existence. While molecules have independent existence.

Q.4) a) The molecules of matter are always in motion and attract each other with a force and this force is called intermolecular force of attraction due to which they are held together.

b) Ans) The molecules can move only when there are gaps / space between them, this space is called intermolecular space.

Q.5) i) The Three states of matter are =

Solid - The molecules are very close to each other hence intermolecular spaces are small and intermolecular force is strong.

Liquids - The molecules are ~~less~~ less closely packed have more intermolecular spaces than solid, less stronger forces than solids. Hence liquids have definite volume but no definite ~~of~~ shape. They take the shape of container in which they are put.

Gases - The molecules in the gases are far apart with weakest force of attraction. Hence gases have neither definite volume nor definite ~~sp~~ shape but easily compressible.

Q6) Substances that can flow are called fluids.
liquids - (water, petrol and sulphuric acid)

<u>Solids</u>	<u>Liquids</u>	<u>Gases</u>
Common salt	Milk	Oxygen
Wax	Mercury	I. P. Cl
Stone	Blood	Carbon Dioxide
Sugar	Coconut oil	
Coal	Kerosene	
Butter		
Copper		

8) a) The molecules of liquids and gases are far apart have more gaps, intermolecular attractive force is very less as ~~compared~~ compared to solids, hence liquids & gases can flow but solids don't as gaps in solid molecules is less and molecular force of attraction very strong.