

1. Five general properties of solid, liquid and gas are:

- stronger intermolecular forces
- particles vibrate in place
- low kinetic energy
- definite shape
- definite volume

2. 1. Each liquid is made up of very tiny particles called molecules. These molecules are very small in size and they are not in a rigid arrangement.

2. The inter-molecular spaces in liquid are more than that in solids.

3. The liquid molecules can move about freely within the boundary of the vessel in which the liquid is kept.

4. The molecules in a liquid are less closely packed and their positions are not fixed as they are free to move within the boundary of the vessel. This is because the inter-molecular forces in a liquid are weak in comparison to that in solids.

Thus, the liquid molecules can slide over one another due to which a liquid can flow. The inter-molecular forces, although weak, are sufficient to keep the molecules within the boundary of the vessel. So, liquids do not have a definite shape, but they have a definite volume.

3. Solids	Liquids	Gases
A solid has a definite shape and a definite volume.	A liquid has definite volume but not a fixed shape.	A gas has neither a fixed volume nor shape.
A solid cannot flow	A liquid can flow	A gas can flow
For eg - table, pen	For eg - water, milk	For eg - air, helium

	Solid	Liquids	Gases
4. Size	They have definite size.	Indefinite	Indefinite
Shape	Definite	Indefinite	Indefinite
Density	Highly dense	Less dense than solid	Less dense than liquid and solids.

4. a) A gas can fill the whole vessel in which it is enclosed because the force of attraction between the particles of gas is low and it moves freely in all possible direction.

b. In solids, the particles are very closely packed and intermolecular force of attraction is high. So solid cannot be compressed.

c. The molecules in liquids are very loosely packed so they are ~~are~~ free to move. So liquids can flow.

MCQs

1. a. Solids

2. b. gases