Table 1. *Comparison of property of three states of matter.*

S.No.	Property	Solid	Liquid	Gas
1.	***Shape***	Definite	Not fixed; takes the shape of the container	Not fixed; fills the entire container of any shape
2.	***Volume***	Definite	Definite	Not fixed; occupies the container of any volume
3.	***Rigidity***	Rigid	Fluid, *i.e.*, flows easily and changes the shape when subjected to outside force	Fluid
4.	***Compressibility***	Negligible	Very low	High; can be compressed to a very small volume
5.	***Melting point***	Above the room temperature	Below the room temperature	Below the room temperature
6.	***Boiling point***	Above the room temperature	Above the room temperature	Below the room temperature
7.	***Inter-particle forces***	Strong enough to hold the constituent particles in fixed positions	Strong enough to hold the constituent particles in aggregation within the bulk, but not in fixed positions	Extremely low, so that the constituent particles are free to move in a continuous chaotic motion at a great speed
8.	***Inter-particle space***	Nearly negligible	Very small	Very large
9.	***Density***	Maximum, due to dense packing	Medium due to close packing	Very low, due to large intramolecular space
10.	***Kinetic energy of particles***	Lesser than liquids	Lesser than gases	Greater than liquids and solids
11.	***Diffusion***	Very slow	Fast	Very fast