Activity to prove particles of matter attract each other

Take an iron nail, piece of wood and rubber band.
Now, try to break them.
We will notice that rubber band is easy to break, then comes wood and at last, we have iron.



Activity: To show that these particles are always in a state of motion

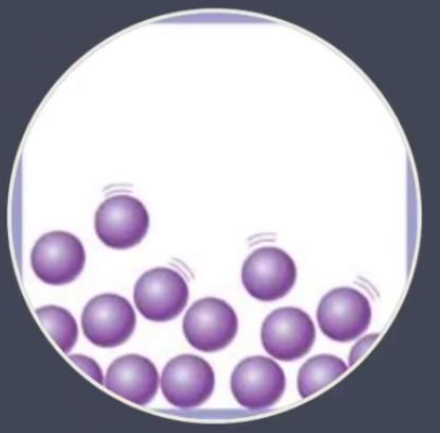
To be taken: Agarbatti, Matchstick, and a stand to hold. Take one stick out of packet, hold it on stand place at corner of room.

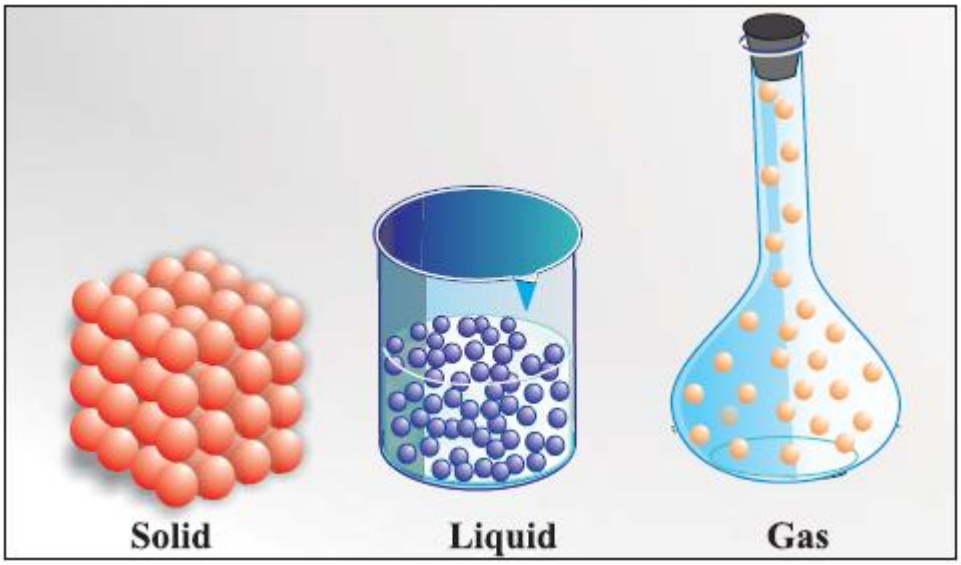
You will see that you can smell the fragrance even though you are far

Theory of Molecular Structure of Matter

- Matter is made up of small particles called molecules.
- They are in a state of continuous motion. Due to this, we can say that they possess Kinetic Energy (K.E.).
- K.E. increases with ↑ in temperature.
- K.E. is maximum in gases and least in solids.

- The space between molecules is called intermolecular space (least in solids & maximum in gases).
- The force that exists between particles is called intermolecular force.
- Intermolecular force ↓ with increase in Intermolecular space.





Fourth State of Matter: Plasma

Fifth State of Matter: Bose Einstein condensate

Plasma: It consists of ionized gas, such that its particles are super energetic and super excited. In devices such as tube lights, CFL, the gases get ionized, on the passage of current and glow with the color depending upon the nature of gas.

For Example: Neon gas emits red glow, argon emits green, yellow,