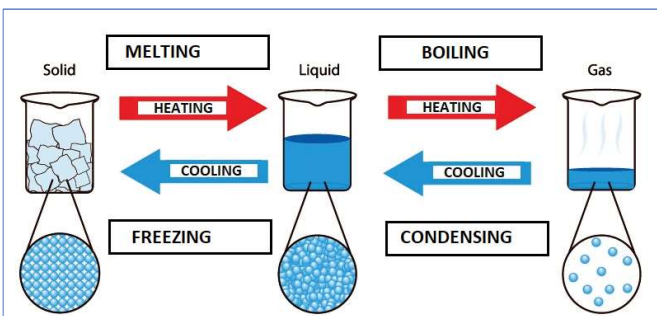


There are 3 states of matter (the different forms that we find stuff around us):

State of Matter	Is it compressible?	Can it flow?	What happens to its shape in a container?
Solid	✗	✗	It keeps a fixed shape
Liquid	✗	✓	It takes the shape of the bottom of the container it is in
Gas	✓	✓	It takes up the whole container it is in

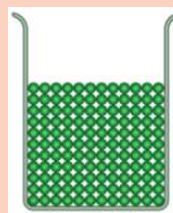
State of matter	Examples
Solid	Iron poles, Wood, Ice,
Liquid	Water, Oil, Milk, Washing up liquid
Gas	Oxygen, Carbon Dioxide, Steam,
Difficult to categorise	Oobleck, Sand, Jelly, Custard



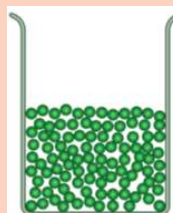
- Temperature is a measure of how hot a substance or a place is.
- Melting point is the temperature a substance changes from a solid to a liquid.
- Boiling point is the temperature a substance changes from a liquid to a gas.

Water's melting point = 0 °C.
and boiling point = 100 °C

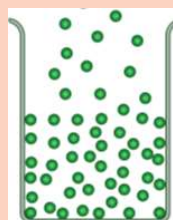
Properties of the particles in the three states of matter



- Solid:
- Particles are very close together
 - In a regular pattern
 - Particles cannot move but can vibrate



- Liquid:
- Particles are close together
 - In a random arrangement
 - Particles can slide past each other



- Gas:
- Particles are far apart from each other
 - In a random arrangement
 - Moving constantly in all directions

Effect of heat on particles

- Heating particles makes them move more.
- In solids, they vibrate more in their fixed position.
- In liquids and gases, they move more quickly.
- As a result, substances expand when they are heated and contract when they are cooled.

