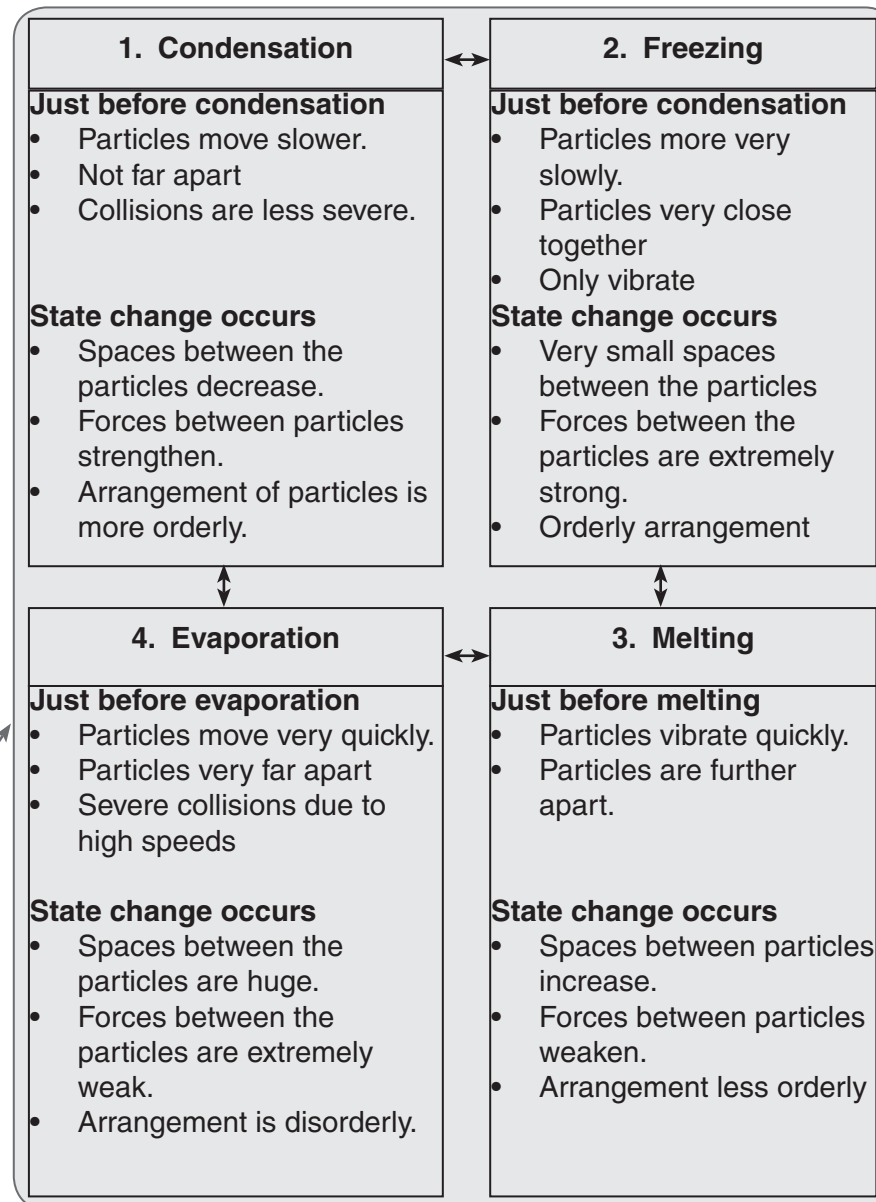


Solid	Liquid	Gas
<ul style="list-style-type: none"> <li>• Particles only vibrate.</li> <li>• Extremely small spaces between the particles.</li> <li>• Very strong forces between the particles</li> <li>• Diffusion does not occur.</li> <li>• Cannot be compressed.</li> <li>• Retains its shape.</li> <li>• Particles in a crystal lattice</li> <li>• Has a specific melting point under standard circumstances.</li> </ul>	<ul style="list-style-type: none"> <li>• Particles move randomly but in restricted fashion.</li> <li>• Smaller spaces between the particles than in gases</li> <li>• Forces between the particles are weaker than in solids.</li> <li>• Diffusion occurs.</li> <li>• There are collisions between the particles.</li> <li>• Fills the base of the container.</li> <li>• Takes on the shape of the container.</li> <li>• Liquids exert pressure in all directions.</li> <li>• Has a specific boiling and freezing point in standard conditions.</li> </ul>	<ul style="list-style-type: none"> <li>• Particles move randomly and quickly.</li> <li>• Huge open spaces between the particles</li> <li>• Weak or negligible forces between particles</li> <li>• Diffusion occurs and it is faster than in liquids.</li> <li>• More intense collisions occur between particles than in liquids.</li> <li>• Is compressible.</li> <li>• Gas exerts pressure in all directions.</li> </ul>



**STATE OF MATTER AND THE KINETIC MOLECULAR THEORY**

**Freezing point**

The temperature at which a liquid completely becomes a solid.

**Melting point**

The temperature at which a solid completely becomes a liquid.

**Boiling point**

The temperature at which the vapour pressure of the substance is equal to the surrounding atmospheric pressure.

**State change means**

- State (phase) of substance changes.
- Chemical composition remains the same.