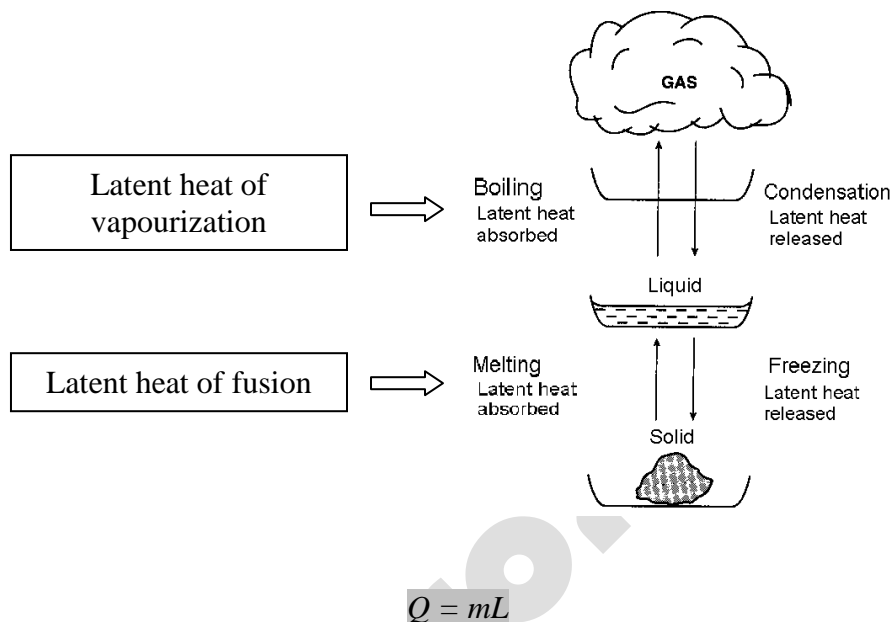


4.3 Latent Heat and Specific Latent Heat

Latent heat: Heat that is absorbed during the change of state of the material (solid ↔ liquid ↔ gas)

Specific latent heat: The amount of heat needed to change the state of 1 kg of a material



where Q = heat energy [J]

m = mass [kg]

L = specific latent heat of the material [J kg^{-1}]*

* Specific latent heat of fusion – for melting/freezing

Specific latent heat of vapourization – for boiling/condensation

4.3.1 Applications

- Cooling drinks with ice
- Ice packages to keep cooled food cold
- Cooking by steaming
- Heating drinks using steam