

Thermal Energy and Heat

Changes of State





Solid



Liquid

Gas



**Fusion (melting) –
when a solid turns
into a liquid
(because the
particles gain
energy and move
faster)**



Solid

Liquid



Gas



Evaporation – when a liquid turns into a gas (because the particles gain energy and move faster)



Solid

Liquid



Gas



**Condensation –
when a gas turns
into a liquid
(because the
particles slow down
and lose/release
energy)**





Solid



Liquid

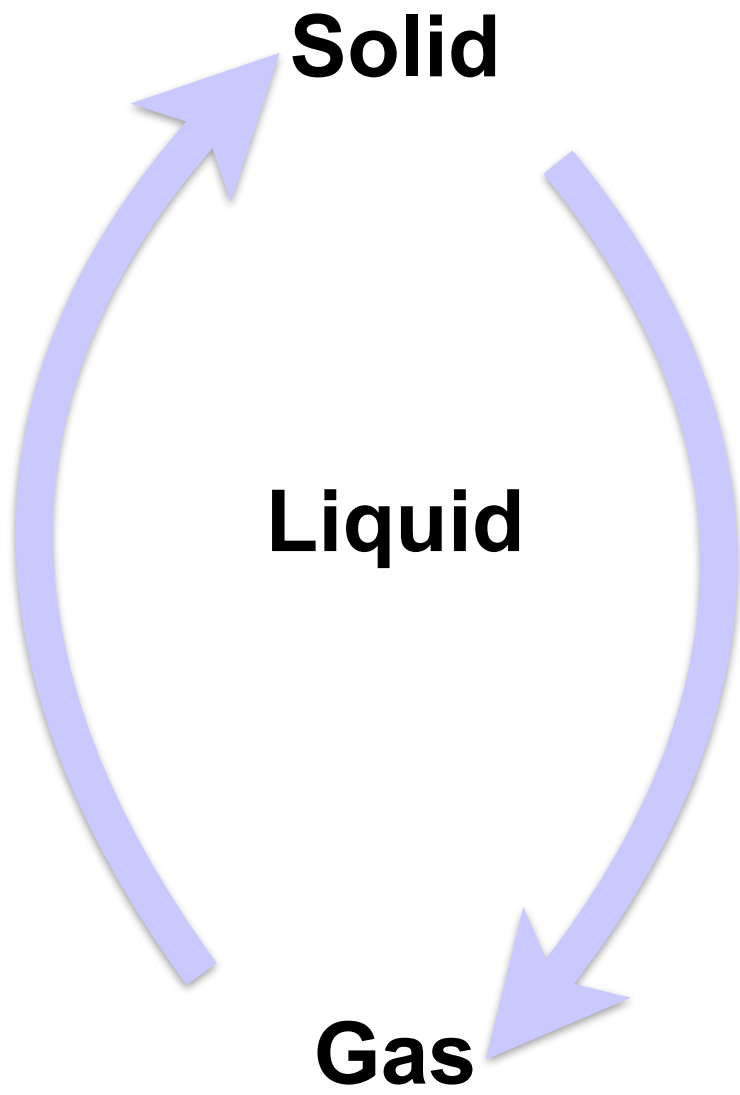
Gas



Solidification

(freezing) – when a liquid turns into a solid (because the particles slow down and lose/release energy)







Sublimation – when
a gas turns into a
solid or a solid
turns into a gas
without turning into
a liquid.





Relate Changes of State to everyday life...

- “sweat” on cold drinks,
- snow melting,
- opening the freezer door and seeing “vapour”,
- “vapour” from the river in the fall, etc.