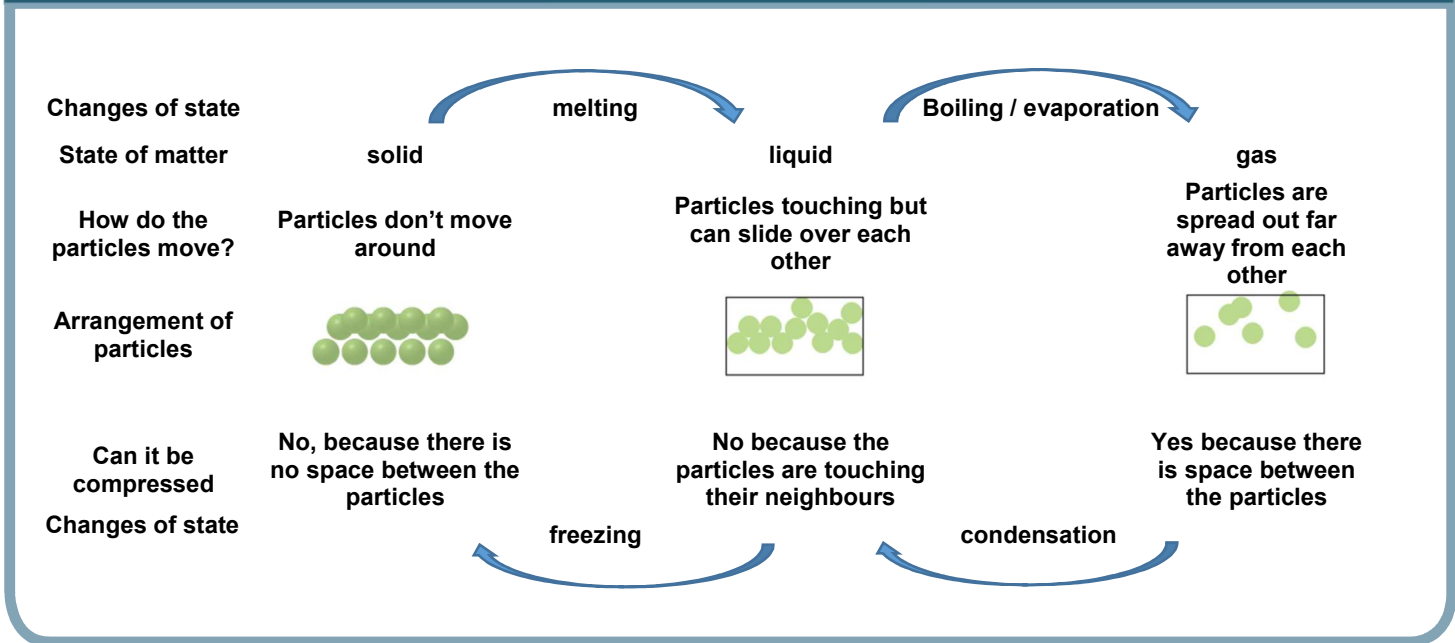


Matter Part 1 Particle Model

Knowledge Organiser

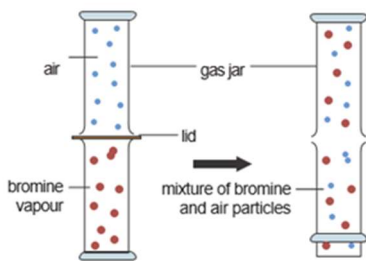


Changes Of State



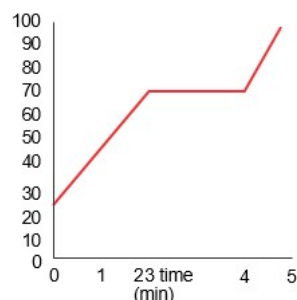
Diffusion

- Diffusion is the movement of particles from an area of high concentration (lots of the same particle) to an area of low concentration (not a lot of the same particle)
- It is a random process which does not need energy
- The speed of diffusion can be increased by:
 - A higher temperature
 - Smaller particles diffusing
 - A gas rather than a liquid
- Diffusion does not happen in a solid as the particles can't flow

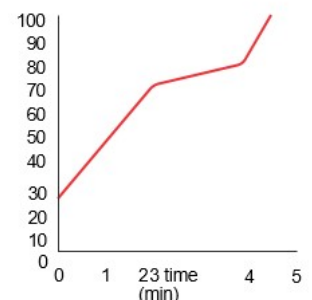


Melting and Boiling Points

- The melting point of a substance is the temperature at which it turns from a solid to a liquid, or a liquid to a solid
- The boiling point of a substance is the temperature at which it turns from a liquid to a gas or a gas to a liquid
- Pure substances have a fixed (sharp) boiling or melting point, whereas impure substances have a range which appears as a diagonal line on a graph



Pure substance (fixed boiling point)



Impure substance (not fixed boiling point)

Key Terms make sure you can write definitions for these key terms

property properties substance freezing Pure substance
 condensation diffusion evaporation Boiling point Impure substance
 Melting point