Foxford Learning Plan

Year 7

Autumn 2

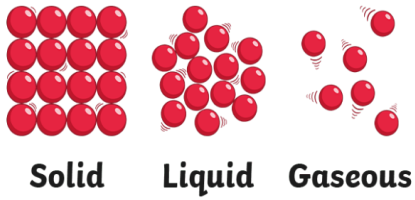
Matter and Mixtures

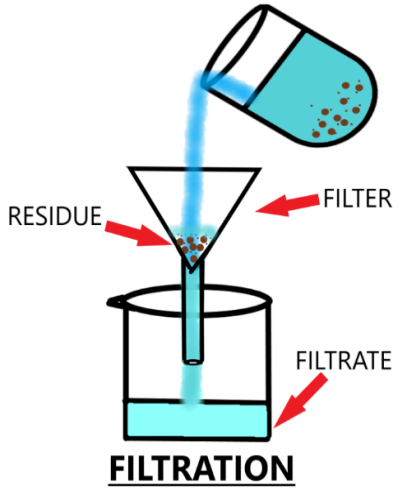
Key Vocabulary	
Boiling	Change from liquid to gas throughout a liquid.
Collide	To bump into another particle or surface.
Condensation	Change from gas to liquid when cooled.
Diffusion	Movement of particles from high to low concentration.
Evaporation	Change from liquid to gas at the surface.
Freezing	Change from liquid to solid.
Gas	A state of matter with particles far apart and moving freely.
Liquid	A state of matter that flows but keeps its volume.
Melting	Change from solid to liquid.
Mixture	Two or more substances physically combined.
Particle	A tiny part of a substance in the particle model.
Pressure	Force acting per unit area.

Over this course I will be able to

Key Skills

- Carry out an appropriate investigation to observe the change between a solid, liquid and gas using water
- Represent the changing of states with a substance using heating or cooling curve graphs
- Investigate how temperature effects the rate of diffusion and link findings to scientific knowledge
- Investigate factors affecting gas pressure and link this to scientific understanding of particle movement
- Separate mixtures using filter paper, chromatography, and distillation





I will understand

- How particles are arranged and move in solids, liquids and gases.
- How changes of state happen when substances are heated or cooled.
- How diffusion happens and why temperature affects its rate.
- How moving particles produce gas pressure and how pressure changes.
- How to distinguish pure substances from mixtures and separate mixtures.