

Science—Year 4—States of Matter

Key Knowledge

- Materials can be grouped together, according to whether they are solids, liquids or gases .
- Solids hold their shape.
- Liquids form a pool in a container not a pile.
- Gasses will escape from an unsealed container
- Some materials change state when they are heated or cooled.
- Temperature is measured in degrees centigrade
- The melting point of a material is the temperature at which it changes from solid to liquid.
- The freeing point of a material is the temperature at which it changes from liquid to solid
- Wax melts at approximately 62 °C
- Dark Chocolate melts at approximately 45°C
- Water boils at 100 degrees Celsius and freezes at 0 degrees Celsius .
- Water evaporates into the air; Water vapour condenses, forming clouds; Water falls as precipitation: rain, sleet or snow
- Evaporation : Heat from the Sun causes water to evaporate from seas, lakes, rivers and streams.
- Condensation: The water vapour in the air rises, and cools down and condense to form small droplets of water. The droplets of water clump together to form clouds.
- Precipitation: When the water droplets are large and heavy enough they fall back to the surface of the Earth as rain or snow.

Key People

John Dalton (1766—1844) proposed the idea that invisible particles made up all matter. He named this the 'Atomic Theory of Matter'.



Vocabulary



Solid	Water droplets
Liquid	Cooling/freezing
Gas	Warming/heating
Melting point	Degrees centigrade
Freezing point	Water cycle
Evaporation	
Condensation	
Precipitation	
Water vapor	

