

Y 4 Science: States of Matter



What I remember from KS1:

– Objects are made from materials, which have properties suited to the object's purpose.



Granular and powdery solids like sand can be confused with liquids because they can be poured, but when poured they form a heap and they do not keep a level surface when tipped. Each individual grain demonstrates the properties of a solid.



molecules

solid	liquid	gas
<ul style="list-style-type: none"> rigid fixed shape fixed volume 	<ul style="list-style-type: none"> not rigid no fixed shape fixed volume 	<ul style="list-style-type: none"> not rigid no fixed shape no fixed volume
cannot be squashed	cannot be squashed	can be squashed

Changing state

	<p>Melting</p> <p>→ Process requires energy</p> <p>Freezing</p> <p>← Process releases energy</p>	
Solid water (ice)		Liquid water

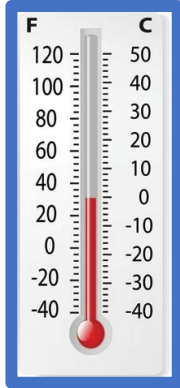
The **freezing point** of water is 0°C.

Boiling	Evaporation

Water boils when it is heated to 100°C (**boiling point**).



Evaporation happens more quickly if the temperature is higher, the liquid is spread out or it is windy.



thermometer



Anders Celsius
1701-1744
Inventor of the **temperature** scale that bears his name.

Condensation is the change back from a gas to a liquid caused by cooling.

