
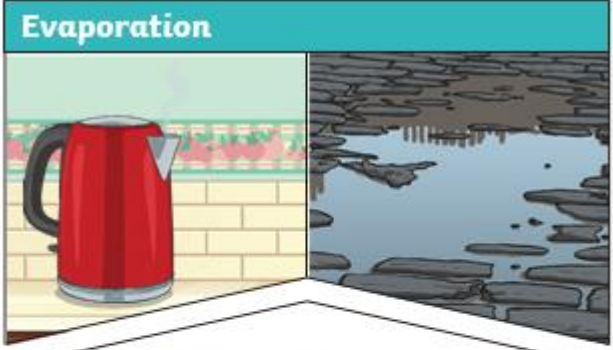


Key Facts – What you need to know		Key Vocabulary	
<ul style="list-style-type: none"> Compare and group materials together, according to whether they are solids, liquids or gases. Solids, liquids and gases can be identified by their observable properties. Solids have a fixed size and shape (the size and shape can be changed but it remains the same after the action). Liquids can pour and take the shape of the container in which they are put. Liquids form a pool not a pile. Solids in the form of powders can pour as if they were liquids but make a pile not a pool. Gases fill the container in which they are put. Gases escape from an unsealed container. Gases can be made smaller by squeezing/pressure. Liquids and gases can flow. How do humans affect the water cycle? What is global warming and how is it affecting water around the world? 		States of Matter	Materials can be one of three states: solids , liquids or gases . Some materials can change from one state to another and back again.
		Solids	These are materials that keep their shape unless a force is applied to them. They can be hard, soft or even squashy. Solids take up the same amount of space no matter what has happened to them.
		Liquids	Liquids take the shape of their container. They can change shape but do not change the amount of space they take up. They can flow or be poured.
		Gases	Gases can spread out to completely fill the container or room they are in. They do not have any fixed shape, but they do have a mass.
		Evaporation	Turn a liquid into a gas. When water turns into water vapour.
Freeze/ freezing	Liquid turns to a solid during the freezing process.	Water vapour	This is water that takes the form of a gas. When water is boiled, it evaporates into a water vapour.
Condensation	Turning from a gas into a liquid. When water vapour cools and turns into water.	Melt/melting	This is when a solid changes to a liquid.
Precipitation	Liquid or solid particles that fall from a cloud as rain, sleet, hail or snow.	 <p>Crawford Village Primary School</p>	
Particle	The tiny things that all materials are made from. The smallest unit of matter		


Pictures and diagrams

Evaporation


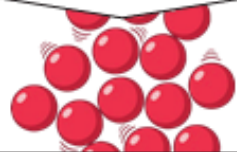
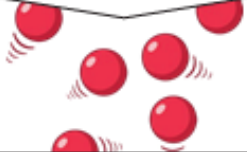


Evaporation occurs when water turns into **water vapour**. This happens very quickly when the water is hot, like in a kettle, but it can also happen slowly, like a puddle **evaporating** in the warm air

Condensation




Condensation is when **water vapour** is cooled down and turns into water. You can see this when droplets of water form on a window. The **water vapour** in the air cools when it touches the cold surface.


Solid	Liquid	Gas
		
Particles in a solid are close together and cannot move. They can only vibrate.	Particles in a liquid are close together but can move around each other easily.	Particles in a gas are spread out and can move around very quickly in all directions.

When water and other **liquids** reach a certain temperature, they change state into a **solid** or a **gas**. The temperatures that these changes happen at are called the boiling, **melting** or **freezing** point.

solid




heat →




liquid

liquid



cold →



solid

If a **solid** is heated to its **melting** point, it **melts** and changes to a **liquid**. This is because the particles start to move faster and faster until they are able to move over and around each other.

When **freezing** occurs, the particles in the **liquid** begin to slow down as they get colder and colder. They can then only move gently on the spot, giving them a **solid** structure.

Accurate measurements of temperatures.

