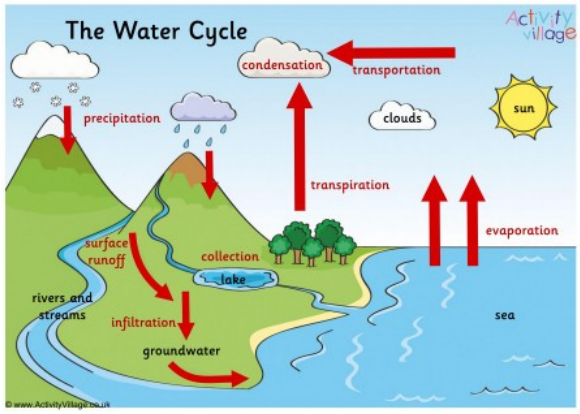
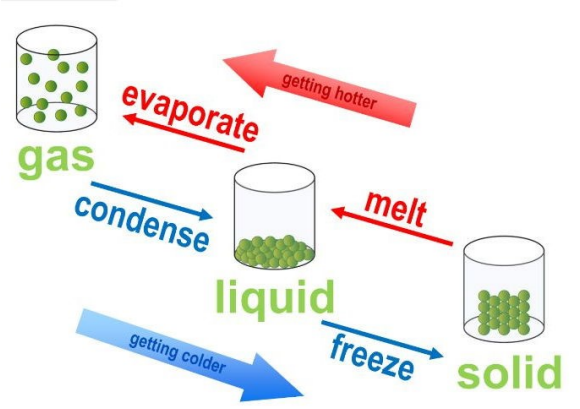
West Leigh Junior School—Knowledge Organiser

Science Focus:	States of Matter	Year 4	Spring Term 2





Key Knowledge	
Materials fall into four main categories	⇒ Solids ⇒ Liquids ⇒ Gases ⇒ Plasma (Not part of our curriculum)
How to spot each type of material:	Solids ♦ Solids stay in one place and can be held. ♦ Most solids keep their shape. They do not flow like liquids. (Some solids like sand or salt can be poured) ♦ Solids always take up the same amount of space. They do not spread out like gases. Liquids ♦ Liquids can flow or be poured easily. They are not easy to hold. ♦ Liquids change their shape depending on the container they are in. Gases ♦ Gases are often invisible. ♦ Gases do not keep their shape. They spread out and change their shape and volume to fill up whatever container they are in.
What does changes of state mean?	When a material changes from one material type to another, we say 'it has changed state.'

Key Vocabulary	
Spelling	**Definition**
boil	To become so hot (100°C) that water bubbles and then turns into a gas.
Celsius	The common scale in the UK for measuring temperature.
container	Something which holds things inside, like a box, jar or tub.
temperature	The measure of warmth or coldness of an object.

What	Explanation	Name of Process	Example
Solid to liquid	When a solid **melts** it changes to a liquid.	melting	When an ice cube melts.
Liquid to gas	A liquid **evaporates** into a gas when it is heated.	evaporation	When water on a roof is warmed up and turns to steam.
Gas to liquid	When a gas it cooled it **condenses** into a liquid.	condensation	When steam from the shower cools on the mirror it turns to water.
Liquid to solid	When a liquid **freezes** it turns into a solid.	freezing	When the water in a pond freezes, it turns to ice.