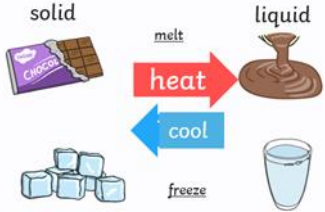


What do we know already:	Vocabulary:		
*I know materials can be sorted by their properties e.g. hard, soft, flexible. *Suitable materials are selected based on their properties e.g. plastic for a bucket. *I can name magnetic and non-magnetic materials.	Tier 1	Tier 2	Tier 3
What's next: * I will learn the properties and structure of the particles in solids, liquids and gases. *I will learn examples of solids, liquids and gases, including more unusual examples e.g. sand, non-Newtonian fluids. *I will learn how materials change state through heating and cooling and the heating and cooling points of different materials. * I will learn about water in the three states of matter and explore the process of evaporation and condensation. *I will learn the role of evaporation in the water cycle. - In Year 5, I will learn that dissolving can change the state of matter.	Heating Boiling Cooling Freezing Melting	Solid Liquid Gas Temperature Condensation Evaporation Water Cycle Particles	Precipitation - rain, snow, sleet, dew, etc, formed by condensation of water vapour in the atmosphere.
			Reversible change - a change that can be changed back again. Melting and heating are examples of reversible changes.
			Irreversible change - a change that cannot be changed back again. Burning or mixing a liquid with bicarbonate of soda are examples of irreversible changes.

What are the features of a solid, liquid and gas?	How do materials change state when heated or cooled?	How does evaporation and condensation change state?	Why is evaporation and condensation important in The Water Cycle?
<u>What is a solid?</u> When materials hold their shape. Their particles are closely packed and form a regular pattern. Their shape is fixed and they will always take up the same amount of space. Examples: Ice, Wood, Glass, Diamond.  <u>What is a liquid?</u> When materials hold the shape of the containers they are in and so can change shape. Their particles are close together but can move over each other. Liquids can be poured. Examples: Water, Milk, washing-up liquid.  <u>What is a gas?</u> Gases can escape from open containers. They often cannot be seen. They have particles which can spread it and move in all directions. Examples: Steam, Hydrogen, Oxygen, Carbon Dioxide. 	Melting is the process of changing a solid into a liquid through heating. Heating makes the solid particles move faster and faster until they turn to a liquid.  Freezing is the process of changing a liquid into a solid through cooling. Cooling makes the particles slow down until a solid structure is formed.	 Evaporating puddles Evaporation is the change from a liquid to a gas at the surface of the liquid. Condensation in the bathroom Condensation is the change from a gas to a liquid, caused by cooling.	The water cycle is the continuous journey of water from oceans and lakes, to clouds, to rain, to streams, to rivers and back into the ocean again. 