



Pinner Wood School



Year Group	4	Term	Summer 1	Subject	Science	Topic	States of matter
						Key Question	What states matter?
Prior Learning and other Curriculum Links	<p>In KS1 children should:</p> <ul style="list-style-type: none"> • Distinguish between an object and the material from which it is made. • Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. • Describe the simple physical properties of a variety of everyday materials. • Compare and group together a variety of everyday materials on the basis of their simple physical properties. • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. 				Skills statements	<p>Scientific Enquiry</p> <ul style="list-style-type: none"> • I can group materials together, according to whether they are solids, liquids or gases including tricky ones like gels, foams, mists and pastes. • I can demonstrate and explain that some materials change state when they are heated or cooled • I can measure or research the temperature at which this happens in degrees Celsius (°C). • I can correctly talk about the part played by evaporation and condensation in the water cycle. • I can show a link between the rate of evaporation and temperature. 	
Fundamentals	<p>compare and group materials together, according to whether they are solids, liquids or gases</p> <p>observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</p>				Key Facts/Sticky Knowledge	<p>Materials can be divided into solids, liquids and gases.</p> <ul style="list-style-type: none"> • Heating causes solids to melt into liquids and liquids evaporate into gases. d) Cooling causes gases to condense into liquids and liquids to freeze into solids. • The temperature at which given substances change state are always the same. 	

	identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature		
Our Curriculum Journey	<p>Stunning Start: N/A</p> <p>Journey: The children's journey starts by considering what they already know about properties using the pre assessment sheet. We then move on to what happens to ice and what makes a difference to how fast ice melts. The children are then taught about melting and freezing and look at how molecules change with both.</p> <p>Show stopper: Complete a fact file on solids, liquids and gases and upload on to Seesaw N/A</p>		
Key Vocabulary (revisited)	Solid, liquid, gas, particles, state, materials, properties, matter, melt, freeze, water, ice,	Key Vocabulary (new)	Solid, liquid, gas, particles, state, materials, properties, matter, melt, freeze, water, ice, temperature, process, condensation, evaporation, water vapour, energy, precipitation, collection,