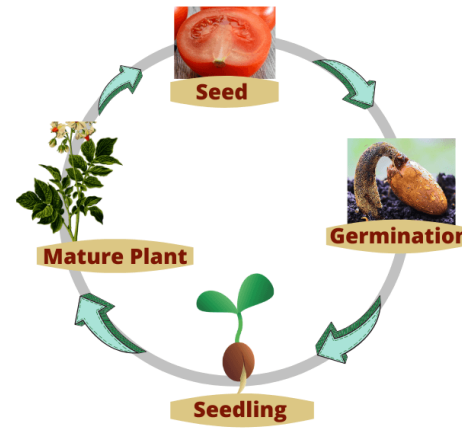


















**Knowledge Organiser for KS1 Science – Plants**

Tier 3 vocabulary		Knowledge item 1																		
<b>Seed</b>	A part of the seed plant which can grow into a new plant. Seeds are usually sown.	<p><b>Seed/bulb to mature plant life cycle</b></p> 																		
<b>Bulb</b>	An underground stem or shoots of a seed plant, usually with leaves for storing food. Bulbs are planted by digging holes into the ground.																			
<b>Germination</b>	When a seed/bulb starts growing roots and shoots																			
<b>Shoots</b>	The growth of a plant above the soil.																			
<b>Roots</b>	Usually grow underground and keep the plant in the ground. They absorb water and nutrients from the soil.																			
<b>Stem</b>	Transports water and nutrients to different parts of the plant.																			
<b>Leaves</b>	One of the (usually) green, flat parts of the plant or tree that grows from the stem or branch.																			
<b>Flowers</b>	The part of the plant that has petals and that makes fruit or seeds.																			
<b>Seedling</b>	A young plant.																			
<b>Dispersed</b>	To spread or distribute in a wide area.																			
Tier 2 vocabulary		Knowledge item 2																		
<b>Mature</b>	Fully grown or developed.	<p><b>What plants need to grow</b></p> <table border="1"> <thead> <tr> <th colspan="3">What Plants Need to Grow</th> </tr> </thead> <tbody> <tr> <td>Water</td> <td></td> <td>A seed needs water to begin germination. A plant needs water to help make food.</td> </tr> <tr> <td>Light</td> <td></td> <td>Plants use the energy from light to make food. Without light they will starve.</td> </tr> <tr> <td>Suitable Temperature</td> <td></td> <td>Without warmth, a plant is unable to start germination. If it too cold the chemicals inside the plant can't work.</td> </tr> <tr> <td>Air</td> <td></td> <td>Plants breathe CO2 and give out oxygen.</td> </tr> <tr> <td>Time</td> <td></td> <td>It takes time for a plant to germinate and grow.</td> </tr> </tbody> </table>	What Plants Need to Grow			Water		A seed needs water to begin germination. A plant needs water to help make food.	Light		Plants use the energy from light to make food. Without light they will starve.	Suitable Temperature		Without warmth, a plant is unable to start germination. If it too cold the chemicals inside the plant can't work.	Air		Plants breathe CO2 and give out oxygen.	Time		It takes time for a plant to germinate and grow.
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<b>Plant</b>	A plant is a living thing that usually grows in the earth and has a stem, leaves, and roots etc.																			
<b>Growth</b>	An increase in size.																			
<b>Temperature</b>	A degree of hotness or coldness that can be measured using a thermometer.																			
<b>Environment</b>	Everything around us.																			
<b>Conditions</b>	The factors or things affecting how someone, or something lives.																			
Knowledge item 3																				
<p><b>Scientist study – Dr Rachel Warmington:</b>            Dr Warmington works at the Eden Project in Cornwall as a plant pathologist. She studies diseases in plants and the effects of climate change on things such as soil.</p>																				
Knowledge item 4																				
<p><b>Human impact on the environment and plant life</b></p>																				
