



Science Knowledge Progression

Nursery			
Biology	Chemistry	Physics	
Plants and animals	Everyday materials	Seasonal changes	How things work
			Forces
<ul style="list-style-type: none"> Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. 	<ul style="list-style-type: none"> Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Talk about the differences between materials and changes they notice. 	<ul style="list-style-type: none"> Begin to learn about the changing seasons. 	<ul style="list-style-type: none"> Explore how things work. Explore and talk about different forces they can feel.



Reception

Biology	Chemistry	Physics	
The natural world	The natural world	Seasonal changes	How things work Forces
<ul style="list-style-type: none"> • <i>Describe what they see hear and feel whilst outside (ELG)</i> 	<ul style="list-style-type: none"> • <i>Explore the natural world around them (ELG)</i> 	<ul style="list-style-type: none"> • <i>Understand the effect of changing seasons on the natural world around them (ELG)</i> 	
<ul style="list-style-type: none"> • Recognise some plants and animals they can see outside. • Confident to touch, smell and hear the natural world around them. • Draw pictures of animals and plants. • Ask questions about some of the plants and animals they have observed. • Identify features of living things. • Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. 	<ul style="list-style-type: none"> • Interact with natural processes (such as ice melting). • Understand some important processes such as changing states of matter. 	<ul style="list-style-type: none"> • Know how the weather is different in each season. 	<ul style="list-style-type: none"> • Talk about why things happen and how things work. • Interact with natural processes (such as sound causing vibration, light travelling through transparent material, an object casting a shadow, a magnet attracting an object and a boat floating on water).



Year 1

Year 1			
Biology		Chemistry	Physics
Animals, including humans		Plants	Everyday materials
Seasonal changes			
<ul style="list-style-type: none"> Name common animals carnivores, etc 	<ul style="list-style-type: none"> Human body and senses 	<ul style="list-style-type: none"> Common plants Plant structure 	<ul style="list-style-type: none"> Properties of materials Grouping materials
<ul style="list-style-type: none"> Identify and name a range of animals by amphibian, reptile, mammal, fish and birds. Identify and name animals by what they eat (carnivore, 	<ul style="list-style-type: none"> Know the name of parts of the human body that can be seen. Say which part of the body is associated with each sense. 	<ul style="list-style-type: none"> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Know and name the petals, stem, leaves and root of a plant. Know and describe the 	<ul style="list-style-type: none"> Name the seasons and know about the type of weather in each season. Know how day length varies depending on the season.



<p>herbivore and omnivore).</p> <ul style="list-style-type: none">• Know how to sort by living and non living things.		<p>roots, trunk, branches and leaves of a tree.</p>		
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Year 2				
Biology			Chemistry	
All living things and their habitats	Animals, including humans	Plants	Everyday materials	
<ul style="list-style-type: none"> • <i>Alive or dead</i> • <i>Habitats</i> • <i>Adaptations</i> • <i>Food chains</i> 	<ul style="list-style-type: none"> • <i>Animal reproduction</i> • <i>Healthy living</i> • <i>Basic needs</i> 	<ul style="list-style-type: none"> • <i>Plant and seed growth</i> • <i>Plant reproduction</i> • <i>Keeping plants healthy</i> 	<ul style="list-style-type: none"> • <i>Identify different materials</i> • <i>Name everyday materials</i> • <i>Properties of materials</i> 	<ul style="list-style-type: none"> • <i>Compare the use of different materials</i> • <i>Compare movement on different surfaces</i>
<ul style="list-style-type: none"> • Classify things by living, dead or never lived • Know how a specific habitat provides for the basic needs of things living there 	<ul style="list-style-type: none"> • Know the basic stages in a life cycle for animals, (including humans). • Know why exercise, a balanced 	<ul style="list-style-type: none"> • Know and explain how seeds and bulbs grow into mature plants. • Know what plants need in order to grow 	<ul style="list-style-type: none"> • Identify and compare different materials including wood, metal, plastic, glass, brick, rock, paper and cardboard. • Know how materials can be 	<ul style="list-style-type: none"> • Know why a material might or might not be used for a specific job.



<p>(plants and animals).</p> <ul style="list-style-type: none">• Match living things to their habitat.• Describe the basic needs of animals, including humans, for survival (water, food and air).• Name some different sources of food for animals.• Know about and explain a simple food chain.	<p>diet and good hygiene are important for humans.</p>	<p>and stay healthy (water, light & suitable temperature).</p>	<p>changed by squashing, bending, twisting and stretching.</p>	
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