



Long Term Overview
SCIENCE



	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Senses Body parts Habitats and animal diets		Cold places – bird feeders, clothing needed Investigating textures (inc ice) Baking		Shadows, sun safety Floating and sinking Water/sand play Growing	
Year 1	Everyday materials Seasons*		Animals including humans		Plants*	
Year 2	Everyday materials		Living things and their habitats *	Plants *		Animals including humans
Year 3	Rocks and soil		Light and dark	Animals inc humans	Plants*	Forces and magnets
Year 4	States of Matter		Electricity	Sound	Living things and habitats*	Animals inc humans
Year 5	Properties and changes of materials		forces	Earth and space	Living things and habitats	Animals inc humans
Year 6	Animals inc humans	Electricity	Evolution and inheritance	Light	Living things and habitats	



*This indicates that this unit of work will be visited at several points in the year to observe similarities and differences.



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YEAR GROUP	TOPICS TO BE TAUGHT THROUGHOUT THE YEAR	TOPICS TO BE SEQUENCED
Reception	<p>Understanding the effect of changing seasons on the natural world around them Describe what they see, hear, and feel whilst outside. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them.</p>	
1	<p><u>Plants</u> While learning to name and identify plants, the pupils should be drawing on a range of different clues. Many plants change in appearance over the year – losing leaves, buds developing into flowers, flowers developing into seeds or berries. At any particular time, only some of these parts will be present. To ensure correct identification, all parts should be considered. Pupils should therefore visit the same plants throughout the year gathering additional clues for identification.</p> <p><u>Seasonal change</u> Pupils should be gathering data about seasonal change regularly throughout the year. As part of this, they will be making observations about the weather and how this affects living things. If data is gathered regularly, this can be reviewed at the end of the year.</p>	<p><u>Animals, including humans</u> This topic can be split into two topics: animals; and humans. However, it is important to ensure that pupils understand that humans are animals.</p>
2	<p><u>Living things and their habitats</u> While learning to name and identify plants, the pupils should be drawing on a range of different clues. Many plants change in appearance over the year – losing leaves, buds developing into flowers, flowers developing into seeds or berries. At any particular time, only some of these parts will be present. To ensure correct identification, all parts should be considered. Pupils should therefore visit the same plants throughout the year gathering additional clues for identification.</p> <p>Animals visible in a habitat will change depending on the weather on the day and the season. In order to build up a full picture of the animals in a habitat. The habitat should be visited at different times throughout the year.</p> <p><u>Plants</u></p>	<p><u>Uses of everyday materials</u> Materials topics often lend themselves to different themes and it may be appropriate to cover the science objectives within different thematic contexts.</p>



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	Seeds and bulbs need to be planted at different times of the year (bulbs in Autumn and seeds, generally, in Spring). For these to reach full maturity, they need to complete their life cycle. This will be determined by the plant, not the time allocated to the topic. Once planted, the beds will need to be visited regularly to weed and make observations of growth.	
3	Plants Many plants have an annual cycle – having buds, flowers, seeds/berries at certain times in the year. Pupils should therefore visit the same plants throughout the year gathering evidence linked to their life cycle e.g. collecting seeds and taking photographs or making observational drawings for buds, flowers etc. This evidence can then be reviewed at the end of the year to exemplify a range of plants' life cycles.	Plants This topic is best taught in the summer term when there is sufficient light in the classroom to grow seedling and plants as part of enquiry work. Links can be made between the Plants, Rocks and Light topics. The ordering is not significant, but the links should be made explicit for the children by the teacher.
4	Living things and their habitats While learning to name and identify plants, the pupils should be drawing on a range of different clues. Many plants change in appearance over the year – losing leaves, buds developing into flowers, flowers developing into seeds or berries. At any particular time, only some of these parts will be present. To ensure correct identification, all parts should be considered. Pupils should therefore visit the same plants throughout the year gathering additional clues for identification. Animals visible in a habitat will change depending on the weather on the day and the season. In order to build up a full picture of the animals in a habitat, the habitat should be visited at different times throughout the year.	Living things and their habitats: Pupil should be taught to construct and interpret a variety of food chains, identifying producers, predators and prey. This statement is within the Animals, including humans topic. In order to construct food chains based on their first-hand experience, this statement should be taught after they have visited a habitat to name and identify the plants and animals. States of matter: In the Sound topic, children need to understand that vibrations from sounds travel through a medium to the ear. It is useful if the children know about the three states of matter – solids, liquids and gases. It is therefore appropriate to teach the States of matter topic before the Sound topic. Sound The Sound topic is conceptually more challenging and is therefore best taught later in the year.
5		Living things and their habitats Before learning about the life cycle of humans, it is helpful if pupils have learnt about the life cycle of plants and animals. It is therefore appropriate to teach the Living things and their habitats topic before the Animals, including humans topic. Forces If the Forces topic is taught before the Earth and space topic, pupils are able to use their understanding of gravity to help them make sense of why the planets orbit the Sun, and the Moon orbits the Earth. Earth and Space



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		Earth and Space is conceptually more challenging therefore should be taught later in the year.
6		<u>Light & Evolution and Inheritance</u> Light and evolution are conceptually more challenging, therefore to be taught later in the year.