## Science in Early Years Foundation Stage

		Plants	Animals including Humans	Habitats	Materials	Forces	Earth and Space
	Term	Spring 2	Autumn 1 & 2		Spring 1	Summer 1	
ery	Objectives	<ul> <li>Plant seeds and care for growing plants</li> <li>Understand the key features of the life cycle of a plant</li> <li>Begin to understand the need to respect and care for the natural environment and all living things</li> </ul>	<ul> <li>Continue developing positive attitudes about the differences between people</li> <li>Know that there are different countries in the world and talk about the differences they have experienced or seen in photos.</li> <li>Begin to make sense of their own life-story and family's history</li> </ul>		•Explore collections of materials with similar and/or different properties •Talk about the differences between materials and changes they notice	• Explore and talk about different forces they can feel	
			<ul> <li>Make healthy choices and food, drink, activity and toothbrushing</li> <li>Understand the key features of the life cycle of an animal</li> <li>Begin to understand the need to respect and care for the natural environment and all living things</li> </ul>				
Nursery	Activities	•Create Nursery Greenhouse •Each children plants and cares for their own seed •Recording and drawing plant growth and changes •Caring for plants and Nursery playground environment •Plant walk – which different plants can they find and identifying/naming them	<ul> <li>Learning about different festivals and countries i.e. Diwali</li> <li>Discussing where in the world their families are from and own identities</li> <li>Looking at the countries of the world and where they are on the map</li> <li>Different places they have gone/are going on holiday</li> <li>Mental health week</li> <li>Healthy eating through texts and games</li> <li>Creating healthy plate – sorting and creative activities</li> <li>Making smoothies</li> <li>Looking at life cycles with life specimen – tadpoles and butterflies</li> <li>Learning about lifecycles and metamorphosis through observation, sequencing and drawing activities</li> </ul>		<ul> <li>Matching and grouping games – can they match the material to its use and explain why?</li> <li>Recyclable materials – making own paper and then use to make cards</li> <li>Children fill different receptacles with water and leave outside in the playground – what will happen?</li> <li>Children use resulting ice blocks to make ice sculptures</li> <li>Children melt ice to remove trapped objects – what can they do to melt the ice faster (pour warm water, move to warmer environment)</li> </ul>	<ul> <li>Focus on push, pull and friction</li> <li>Push cars with different amounts of force – how will this impact how far/fast they go?</li> <li>Push cars on different surfaces – discussing terms such as rough and smooth</li> <li>Push/Pull sorting and grouping activities.</li> </ul>	
	Term		Autumn 1 & 2	Spring 1	Summer 2		Spring 2 & Summer 1
Reception	Objectives		Know and talk about the different factors that support their overall health and wellbeing: • Physical exercise • Healthy eating • Toothbrushing • Sensible amounts of 'screen time' • Having a good sleep routine Being a safe pedestrian	Recognise some similarities and differences between life in this country and life in other countries Recognise some environments that are different to the one in which they live 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	•Understand some important process and changes in the natural world including changing states of matter		<ul> <li>Understand the effect of changing seasons on the natural world around them</li> <li>Understand some important process and changes in the natural world including the seasons</li> </ul>
	Activities		<ul> <li>Oral health – videos on how to brush teeth, brushing plaque of the model</li> <li>Cutting and sticking teeth in mouth</li> <li>Drawing own teeth</li> </ul>	Read 'Coming to England' and activities comparing life in Caribbean and England     Focus on adaptation and changes to different environments	<ul> <li>Rainbow experiment (growing a rainbow to demonstrate properties of liquids)</li> <li>Making butter and slime to demonstrate changes between states</li> </ul>		<ul> <li>Observing the avocado tree in different seasons</li> <li>Planting seeds</li> <li>Drawing and labelling flower</li> <li>Seasonal table</li> <li>Seasonal activities: winter snow globe, learning Autumn poems, observational flower drawings in spring</li> </ul>

	<ul> <li>Experiment with eggs in different liquids (water, milk, juice, coke)</li> <li>Creative and sorting activities with healthy and non-healthy foods</li> <li>Create food plate – different amounts of different food types</li> <li>Grow vegetables in Reception garden and make salad</li> <li>Nocturnal animals</li> <li>Sleep – practices to help sleep well</li> <li>Focus on bees and senses linked to Rosh Hashannah.</li> <li>Safety walks around the local area</li> <li>Visit from lollipop lady</li> <li>E-Safety visit f rom Education Child Protection</li> <li>Ongoing: My Happy Mind Mindfullness Take 10 Music and Movement E-Safety</li> </ul>	<ul> <li>Observational pictures of polar bear</li> <li>Step by step polar bear drawing</li> <li>Adopt a class polar bear</li> <li>Blubber</li> <li>experience – dip their finger in butter and then in icy water</li> </ul>	Water cycle activities: •Steam and kettle demonstration of water cycle (key vocabulary – evaporation, condensation and precipitation) •Sequencing tasks Writing up experiments: •Diving- sheet with a picture of equipment and they have to label it •Deeper – Write equipment list and one sentence to describe the experiment •Deepest – equipment list and basic method section using simple sentences	<ul> <li>Links to Shavuot</li> <li>Environmental changes and the need for recycling</li> <li>Activities around the 4 R's – repair, reduce, recycle, reuse</li> <li>Clean-up in playground and Reception pond to protect local wildlife</li> <li>Making posters about protecting our local environment</li> </ul>
Texts	<ul> <li>Adventures in the molar system</li> <li>Topsy and Tim go to the dentist</li> <li>What if there were no bees?</li> <li>Willbee the bumblebee</li> <li>The boy who lost his bumble</li> </ul>	•Coming to England •Where is my Home? •Little Polar Bear gets lost in the tropics •Little Polar Bear finds a friend •The Polar Bears Home	•Change it! Solids, liquids, gases and you •I see Science – States of Matter	•Why do leaves change colour? •Poem: Autumn Leaves •Harry Saves the Ocean •Someone Swallowed Stanley •George Saves the World by Lunchtime •Greta and the Giants