



CYCLE A 2024-2025	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
FS1	<p><u>Humans</u> F1 - Introducing Senses</p> <ul style="list-style-type: none"> - <i>Use all their senses in hands-on exploration of natural materials.</i> <p><u>Materials</u> F1 - Making & Tasting Bread</p> <ul style="list-style-type: none"> - <i>Talk about the differences between materials and changes they notice.</i> <p><u>Seasonal Changes</u> F1 - Introducing Autumn</p> <ul style="list-style-type: none"> - <i>Use all their senses in hands-on exploration of natural materials.</i> 	<p><u>Light</u> F1 - Source of Light linked to celebrations (candles, fairy lights, fireworks etc)</p> <p>Comparative testing</p> <ul style="list-style-type: none"> • Compare how bright different light sources are. <p>Classification</p> <ul style="list-style-type: none"> • Which materials block light to help us protect ourselves from the Sun? <p><u>Materials</u> F1 - explore a range of materials in a sensory way, especially through touch</p> <p>Classification</p> <ul style="list-style-type: none"> • Sort materials using simple properties. 	<p><u>Materials</u> F1 - Materials</p> <ul style="list-style-type: none"> • Explore materials with different properties. (Birth to three) • Explore natural materials, indoors and outside. (Birth to three) <p>Exploring changing materials as they are cooked (pancakes) Exploring materials as they are heated (chocolate while making Easter nests)</p> <p>Encourage children to talk about the materials they explore, using their senses. Encourage children to talk about the changes when ingredients are</p>	<p><u>Seasonal Changes</u> F1 - Seasonal Changes</p> <ul style="list-style-type: none"> • Looking for signs of Spring in our school environment • Looking at photographs of different seasons and types of weather • Sharing books about different seasons and types of weather <p>Sharing books about the seasons</p> <ul style="list-style-type: none"> • Going on seasonal walks to observe key features of the seasons • Making artwork with seasonal found objects • Encourage children to talk about the weather throughout the year. • Encourage children to talk about the 	<p>F1 - Animals, excluding humans - Animals & their Young</p> <ul style="list-style-type: none"> • 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. • Encourage children to observe young animals closely and talk about how they change over time (chicks) • Encourage children to name and describe animals and their young, including how they change over time, while reading books, watching videos, looking at pictures or playing matching games. • Encourage children to ask questions about different animals and their young. • Encourage children to talk about similarities and differences between animals and their young, including patterns, spots or stripes. • Encourage children to draw animals and their young. <p>Observing over time</p> <ul style="list-style-type: none"> • How does the ... change over time? <p>Researching using secondary sources</p> <ul style="list-style-type: none"> • Find out more about the life cycles of the animals observed. <p>Classification</p> <ul style="list-style-type: none"> • Match animals and their young. <p>Model and encourage children to use</p>	



			<p>mixed, cooked, heated and cooled, frozen and blended.</p> <p>Encourage children to ask questions about the materials they encounter.</p> <p>Observing over time</p> <ul style="list-style-type: none"> • How does the pancake mixture change when different ingredients are added? • How does chocolate change when heated? <p>Model and encourage children to use vocabulary such as:</p> <p>mix, stir, cook, hot, oven, microwave, change, burn, melt, hard, runny, set, freeze, freezer, cold, blended, hard, soft, wobbly</p>	<p>animals and plants that they find in different seasons.</p> <ul style="list-style-type: none"> • Encourage children to ask questions about the weather and seasonal changes. <p>Observing over time</p> <p>How does the natural world change with the seasons?</p> <p>Researching using secondary sources</p> <ul style="list-style-type: none"> • Find out about how animals behave in different seasons. • Find out about the weather and seasons. <p>Model and encourage children to use vocabulary such as:</p> <ul style="list-style-type: none"> • spring, summer, autumn, winter, seasons, sunny, cloudy, hot, warm, cold, raining, snow, icy, puddles, windy, rainbow, animals, young, plants, flowers 	<p>vocabulary such as: egg, chick, bird, frog spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young, fur, feathers, scales, tail, wings, beak, claws, paws, hooves, swim, walk, run, jump, jump, fly, patterns, spots, stripes.</p> <p>F1 - Humans - Babies - How I've grown & changed</p> <ul style="list-style-type: none"> • Use all their senses in hands-on exploration of natural materials. • Begin to make sense of their own life-story and family's history. • Understand the key features of the life cycle of a plant and an animal. <ul style="list-style-type: none"> • Encourage children to describe how they have changed since they were babies. • Encourage children to talk about how to care for a baby. • Encourage children to ask questions of an expectant mother or a parent with a baby. <p>Observing over time</p> <ul style="list-style-type: none"> • How does a baby change over time? <p>Research using secondary sources</p> <ul style="list-style-type: none"> • Find out about the human life-cycle <p>Model and encourage children to use vocabulary such as: grow, change, baby, toddler, child, adult, old person,</p> <p>F1 - Living things & their habitats - making &</p>
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					<p>growing grass heads Use all their senses in hands-on exploration of natural materials.</p> <ul style="list-style-type: none">• Explore collections of materials with similar and/or different properties.• Begin to understand the need to respect and care for the natural environment and all living things. <p>Sharing books about the plants and growing Going on nature walks outside to observe plants Encourage children to use all appropriate senses to explore the parts of plants on the walk, including the leaves, stems/trunks, flowers, seeds, berries and fruit. Encourage children to talk about the objects in the collection, including where they came from on the walk and whether they were part of a plant, animal or neither. Encourage children to talk about the natural objects that they are observing closely, drawing and sorting. Encourage children to look for patterns on the natural objects in the collection. Encourage children to ask questions about the surrounding natural environment and the natural objects in the collection. Investigate that seeds need water to grow by making grass heads and watering them to make the grass (hair) grow.</p> <p>Classification</p>
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					<ul style="list-style-type: none"> Find and identify natural objects to include in the collection. Which natural objects are from plants, animals or neither? <p>Model and encourage children to use vocabulary such as: <i>natural, plant, animal, leaves, seeds, conkers, acorns, twigs, bark, shells, feathers, pebbles, stones, same, different, pattern</i></p>
<p>FS2</p>	<p><u>Humans</u> F2 - Exploring Our Senses</p> <ul style="list-style-type: none"> Talk about members of their immediate family and community. <p><u>Materials</u> F2 - Making & Tasting Bread</p> <ul style="list-style-type: none"> Describe what they see, hear and feel. <p><u>Seasonal Changes</u> F2 - Exploring Signs of Autumn</p> <ul style="list-style-type: none"> Explore the natural world around them. 	<p><u>Light</u> F2 - Sources of Light (identify different sources of light, including the sun) F2 - Shadows F2 - Rainbows Making rainbows from sunlight e.g. bubbles, water sprinkler, holographic paper, CDs etc.</p> <ul style="list-style-type: none"> Sharing books about rainbows <p>Comparative testing • Compare the shape of shadows made by different objects. Observing over time</p>	<p><u>Materials</u> F2 - F2 - Opportunities to explore a range of materials and how they change</p> <ul style="list-style-type: none"> Making gingerbread men and observing how the mixture changes as different ingredients are added Comparing and contrasting the gingerbread mixture 	<p><u>Seasonal Changes</u> F2 - Seasonal Changes</p> <ul style="list-style-type: none"> Looking for signs of Spring in our school environment Looking at photographs of different seasons and types of weather Sharing books about different seasons and types of weather <p>Drawing around puddles</p> <ul style="list-style-type: none"> Catching rain and hail in buckets <p>Going on seasonal walks to observe key features of the seasons</p> <ul style="list-style-type: none"> Making artwork with 	<p>F2 - Animals, excluding humans - Life cycle of a chick & frog</p> <ul style="list-style-type: none"> 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. <p>Explore the natural world around them, making observations and drawing pictures of animals and plants.</p> <ul style="list-style-type: none"> Caring for eggs and the young animals that emerge, such as chicks & frogs Sharing books with information about animal life cycles (fiction and nonfiction) Watching videos of animals and their young and how they change overtime Encourage children to observe young animals closely and talk about how they change over time. Encourage children to name and describe animals and their young, Visiting a farm, zoo or pet shop, particularly to see young animals



	<ul style="list-style-type: none"> • Describe what they see, hear and feel whilst outside. • Understand the effect of changing seasons on the natural world around them. 	<ul style="list-style-type: none"> • How does a toy's shadow change during the day? <p>Researching using secondary sources</p> <ul style="list-style-type: none"> • Find out about shadows. • Find out about rainbows. 	<p>before it is heated and afterward (and at intervals in between) - how is it different?</p> <p>Encourage children to talk about the natural materials they explore, using their senses.</p> <p>Encourage children to compare and describe how materials change over time and in different conditions.</p> <p>Comparative testing</p> <ul style="list-style-type: none"> • How do gingerbread men look taken out of the oven at different intervals <p>Observing over time</p> <ul style="list-style-type: none"> • How does the biscuit (gingerbread) mixture change as it is cooked? <p>Model and encourage children to use</p>	<p>seasonal found objects</p> <ul style="list-style-type: none"> • Encourage children to talk about how they feel in different types of weather/seasons. • Encourage children to talk about the weather throughout the year. • Encourage children to talk about how the ground changes when it rains. • Encourage children to measure the size of puddles using their feet after it rains. • Encourage children to talk about how puddles change over time after it rains. • Encourage children to talk about the animals and plants that they find in different seasons. • Encourage children to ask questions about the weather and seasonal changes. • Taking photographs 	<p>Observing over time</p> <ul style="list-style-type: none"> • How does the ... change over time? (chicks & frogs) <p>Researching using secondary sources</p> <ul style="list-style-type: none"> • Find out more about the life cycles of the animals observed. <p>Model and encourage children to use vocabulary such as: egg, chick, bird, frog spawn, tadpole, froglet, frog, grow, change, die, names of animals and their young, fur, feathers, scales, tail, wings, beak, claws, paws, hooves, swim, walk, run, jump, jump, fly, patterns, spots, stripes.</p> <p>Expose children to supplementary vocabulary such as:</p> <ul style="list-style-type: none"> • life cycle, mane, webbed feet, environment, , camouflage <p>F2 - Humans - Myself - How I've grown & changed</p> <ul style="list-style-type: none"> • Begin to make sense of their own life-story and family's history. • Understand the key features of the life cycle of a plant and an animal. <p>Understand some important processes and changes in the natural world around them</p> <ul style="list-style-type: none"> • Encourage children to describe how they have changed since they were babies & toddlers.. <p>Encourage children to talk about what they can do now that they were not able to do when they were babies, including how to look after themselves.</p> <p>Observing over time</p>
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			<p>vocabulary such as:</p> <ul style="list-style-type: none"> ice, water, frozen, icicle, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smallest, hard, soft, strong, weak, hot, apply heat, best, change, change back <p>Expose children to supplementary vocabulary such as:</p> <ul style="list-style-type: none"> solid, liquid, gas, most suited 	<p>of the plants they find in the school grounds at different times in the year</p> <ul style="list-style-type: none"> Observing closely and drawing the plants in the school grounds at different times in the year Matching animals and plants they find to pictures that identify them. <p>Observing over time How does the natural world change with the seasons? Taking pictures of the same tree we observed in autumn & winter - how does it look in the Springtime.</p> <p>Researching using secondary sources</p> <ul style="list-style-type: none"> Find out about how animals behave in different seasons. Find out about the weather and seasons. <p>Model and encourage children to use vocabulary such as:</p>	<ul style="list-style-type: none"> How have I changed since I was born? <p>Research using secondary sources</p> <ul style="list-style-type: none"> Find out about the human life-cycle <p>Classification</p> <ul style="list-style-type: none"> Sort images of humans according to their age. <p>Model and encourage children to use vocabulary such as: grow, change, baby, toddler, child, adult, old person, hair (black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (blue, brown, green, grey), skin (black, brown, white), big/tall, small/short, bigger/smaller, old, young.</p> <p>Expose children to supplementary vocabulary such as:</p> <ul style="list-style-type: none"> bald, elderly, wrinkles, male, female, freckles <p>F2 - Living things & their habitats - what a plant needs to grow - growing bean plants.</p> <ul style="list-style-type: none"> Begin to understand the need to respect and care for the natural environment and all living things. Explore 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. Support children to identify different plants e.g. trees, bushes, flowers, vegetables, herbs. Ensure children are careful when exploring the plants and do not damage them in any way. Encourage children to talk about the plants
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HALLGATE PRIMARY SCHOOL
SCIENCE LONG TERM PLAN

				<ul style="list-style-type: none"> • spring, summer, autumn, winter, seasons, sunny, cloudy, hot, warm, cold, shower, raining, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, windy, rainbow, animals, young, plants, flowers <p>Expose children to supplementary vocabulary such as:</p> <ul style="list-style-type: none"> • hibernate, migrate, snowflake 	<p>they find.</p> <ul style="list-style-type: none"> • Support children to name the plants they find. • Encourage children to ask questions about the plants and animals they find. <p>Observing over time:</p> <ul style="list-style-type: none"> • How does a bean plant grow and change over time? <p>To understand what a plant needs to grow (bean with and without water)</p> <p>Researching using secondary sources</p> <ul style="list-style-type: none"> • Find out more about the life cycles of a bean plant. <p>Understand what a plant needs to grow.</p> <p>Model and encourage children to use vocabulary such as:</p> <p><i>plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants, water, soil, bean, stalk, leaves, flower, roots, grow, dry, living</i></p> <p>Expose children to supplementary vocabulary such as:</p> <p><i>environment, habitat,</i></p>
Y12	Seasonal Changes - ongoing throughout the year (monthly lesson) Focus on weather, recording weather data etc.				
	<p>Animals inc Humans (Y1 unit)</p> <p>Animals inc Humans (Y2 unit)</p>	<p>Animals inc Humans (Y2 unit)</p> <p>Plants (Y1 unit)</p>		<p>Plants (Y2 unit)</p> <p>Investigation related to recycling/climate change</p>	



Y34	States of Matter (Y4)	Electricity (Y4) Plants (Y3)	Plants (Y3) Living Things & habitats (Y4)
Y56	Properties and Changes of materials (Y5)	Living Things & habitats (Y5) Evolution & Inheritance (Y6)	Evolution & Inheritance (Y6) Living Things & habitats (Y6)

CYCLE B 2025-2026	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
FS1 <ul style="list-style-type: none"> ☰ Aut 1 EYFS Sci... ☰ Aut 2 EYFS Sci... ☰ Spring 1 EYFS ... ☰ Spring 2 EYFS ... 	Humans F1 - Introducing Senses <ul style="list-style-type: none"> - Use all their senses in hands-on exploration of natural materials. Materials/Plants F1 - Identifying Vegetables & Tasting vegetable soup (made by F2) <ul style="list-style-type: none"> - Talk about different 	Light F1 - Introducing 'Light' <ul style="list-style-type: none"> - • Explore how things work. - • Talk about the differences in materials and changes they notice. Animals excluding humans F1 - • Understand	Materials F1 - Materials <ul style="list-style-type: none"> • Explore materials with different properties. (Birth to three) • Explore natural materials, indoors and outside. (Birth to three) 	Materials F1 - Materials <ul style="list-style-type: none"> • Explore materials with different properties. (Birth to three) • Explore natural materials, indoors and outside. (Birth to three) Healthy Eating F1 - Opportunities to learn about		



	<p>vegetables, naming them and finding out where they grow.</p> <p>Seasonal Changes F1 - Introducing Autumn</p> <ul style="list-style-type: none"> - Use all their senses in hands-on exploration of natural materials. 	<p>the key features of the life cycle of a plant and an animal.</p> <ul style="list-style-type: none"> • Begin to understand the need to respect and care for the natural environment and all living things. 		<p>how to take care of themselves</p> <ul style="list-style-type: none"> • Talking about how they look after their own health and hygiene 		
<p>FS2</p> <ul style="list-style-type: none"> Aut 1 EYFS Sci... Aut 2 EYFS Sci... Spring 1 EYFS ... Spring 2 EYFS ... 	<p>Humans F2 - Exploring Our Senses</p> <ul style="list-style-type: none"> - Talk about members of their immediate family and community. <p>Materials F2 - Making & Tasting vegetable soup</p>	<p>Light F2 - Exploring light and dark</p> <ul style="list-style-type: none"> • Describe what they see, hear and feel whilst outside. <p>Animals excluding Humans F2 - • Recognise some environments that are different to the one in which they live.</p>	<p>Materials F2 - Opportunities to explore a range of materials in a sensory way, including natural materials Looking for dew, ice, icicles and frost in the playground Baking cupcakes and removing one after every five minutes</p>	<p>Animals inc Humans F2 - Opportunities to learn about how to take care of themselves</p> <ul style="list-style-type: none"> • Demonstrating and talking about how they look after themselves • Talking about other people that look after them • Encourage 		



	<p>- Describe what they see, hear and feel.</p> <p>Seasonal Changes F2 - Exploring Signs of Autumn</p> <ul style="list-style-type: none"> Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them. 		<p>Choosing where to put ice cubes in the playground and observing how quickly they melt Observing how a large block of ice changes over time, using string to measure around it Making a snowman and observing how it changes over time Making snowballs and putting them in different parts of the playground and observing how they change over time</p> <p>Seasonal Changes F2 - Seasonal Changes Playing in the rain and snow</p> <ul style="list-style-type: none"> Catching rain and hail in buckets 	<p>children to talk about the people who look after them, both within their family and the wider community e.g. teachers, doctors, dentists etc.</p> <ul style="list-style-type: none"> Sharing videos of people who care for us and how we look after ourselves <p>Materials F2 - Opportunities to explore a range of objects and sort them by the materials they are made from</p>		
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			<ul style="list-style-type: none"> • Making icicles • Looking at photographs of different seasons and types of weather • Sharing books about different seasons and types of weather 			
Y12	Seasonal Changes - focus on plants, trees, animals, insects (monthly walk)					
	Everyday Materials (Y1 unit) Uses of Everyday Materials (Y2 unit)	Uses of Everyday Materials (Y2 unit) - linked to Crest Awards.		Living things and their habitats (Y1 unit)		
Y34	Rocks and Soils (Y3) Light (Y4)	Animals inc Humans (Y3) Animals inc Humans (Y4)		Forces and Magnets (Y3) Sound (Y4)		
Y56	Electricity (Y6) Light (Y6)	Earth and Space (Y5) Forces (Y5)		Animals inc Humans (Y5) - very small unit Animals inc Humans (Y6)		