



## Progression Map For Science

Knowledge/Skill	EYFS	YEAR 1	YEAR 2
<b>Working Scientifically Skills</b>			
<b>The pupil can, using appropriate scientific language from the national curriculum:</b>			
<p>• <b>ask their own questions about what they notice</b></p> <p><b>PLAN</b></p>	<p>3-4 year olds;</p> <p>C&amp;L; Understand How and Why questions</p> <p>Understanding the World;</p> <ul style="list-style-type: none"> <li>• Talk about what they see, using a wide vocabulary</li> </ul> <p>Reception;</p> <p>C&amp;L;</p> <ul style="list-style-type: none"> <li>• Learn new vocabulary</li> <li>• Ask questions to find out more and check what has been said to them</li> <li>• Articulate their ideas and thoughts in well-formed sentences</li> <li>• Describe events in some detail</li> </ul>	<p>Ask simple questions when prompted</p> <p>Suggest ways of answering a question</p>	<p>Ask simple questions</p> <p>Recognise that questions can be answered in different ways</p>

<p>• <b>use different types of scientific enquiry to gather and record data, using simple equipment where appropriate, to answer questions:</b></p> <p><b>DO</b></p>	<p>3-4 year olds;</p> <p>Understanding the World;</p> <ul style="list-style-type: none"> <li>• Talk about what they see, using a wide vocabulary</li> <li>• Explore how things work</li> </ul> <p>Reception; C&amp;L;</p> <ul style="list-style-type: none"> <li>• Learn new vocabulary</li> <li>• Articulate their ideas and thoughts in well-formed sentences</li> <li>• Describe events in some detail</li> <li>• Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen</li> <li>• Use new vocabulary in different contexts</li> </ul> <p>Understanding the World;</p> <ul style="list-style-type: none"> <li>• Explore the natural world around them</li> <li>• Describe what they see, hear and feel while they are outside</li> <li>• Recognise same and different</li> </ul>	<p>Make relevant observations using simple equipment</p> <p>Conduct simple tests, with support</p> <p>Identify and classify with Guidance</p>	<p>Observe closely, using simple equipment</p> <p>Perform simple tests</p> <p>Identify and classify</p>
<p><b>observing changes over time</b></p>		<p>Make relevant observations using simple equipment</p>	<p>Observe closely, using simple equipment</p>
<p><b>noticing patterns</b></p>		<p>Make relevant observations using simple equipment</p>	<p>Observe closely, using simple equipment</p>

<b>grouping and classifying things</b>		Identify and classify with guidance	Identify and classify
<b>carrying out simple comparative tests</b>		Conduct simple tests, with support	Perform simple tests
<b>finding things out using secondary sources of information</b>		Use books, internet, peers and adults (with relevant knowledge or experience) to answer questions with modelling and support	Use books, internet, peers and adults (with relevant knowledge or experience) to answer questions with support
<b>RECORD</b>	<p>Reception</p> <p>Art express ideas and feelings</p> <ul style="list-style-type: none"> <li>Refining ideas and developing their ability to express them</li> </ul> <p>Understanding the World</p> <ul style="list-style-type: none"> <li>Making observations and drawing pictures...</li> </ul>	Gather and record data in a variety of ways e.g charts, pictograms, carol diagrams	<p>Record and communicate their findings in a range of ways and begin to use simple scientific language</p> <p>Gather and record data to help answer questions</p>
<p><b>• communicate their ideas, what they do and what they find out in a variety of ways</b></p> <p><b>REVIEW</b></p>		<p>Recognise findings</p> <p>Use their observations and ideas to suggest answers to simple questions</p>	<p>Use their observations and ideas to suggest answers to simple questions</p> <p>Make suggestions about how to improve their practice</p>

## Cumulative Vocabulary

	<p>Same, different, I can see/ feel/ hear/ taste/ smell, I wonder what/ why/who/ when questions Magnifying glass, magnets, floating, sinking, small, large, tiny, huge Use of visual time tables, days of the week, months of the year, seasons, Observational drawing</p>	<p>Question, answer, similar, equipment, gather, measure, results, sort, group, explore, pattern, chart, graph, long term study, compare, describe, test, challenge, trial, research, discover, investigate, graph, measure, ruler, centimeter, thermometer, microscope</p>	<p>Record, analyse, information, represent, fair test, metre, vocabulary, observe, notice, secondary sources, data, classify, hand lens, beaker, timer</p>
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## Science Content

Science content		The pupil can statements:	
<p><b>Animals including Humans</b></p>	<p>3-4 year olds PSED Make healthy choices about food, drink, activity and toothbrushing 3-4 year olds</p> <p>Understanding the World</p> <ul style="list-style-type: none"> <li>● Begin to make sense of their own life-story and families history</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 living things</li> </ul> <p>4-5 years olds Reception PSED Know and talk about the different factors that support their overall health and wellbeing;</p> <ul style="list-style-type: none"> <li>● Regular physical activity</li> <li>● Healthy eating</li> <li>● Toothbrushing</li> <li>● Sensible amounts of 'screen time'</li> </ul>	<p>● Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</p> <p>● Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>● Identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>● Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p>	<ul style="list-style-type: none"> <li>● Understand that animals, including humans, have offspring which grow into adults</li> <li>● Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</li> <li>● Describe the basic needs of animals, including humans, for survival (water, food and air)</li> </ul>

	<ul style="list-style-type: none"> <li>• Having a good sleep routine</li> <li>• Being a safe pedestrian</li> </ul>		
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### Cumulative Vocabulary

	<p>Body, head, arm, leg, knee, face, eye, ears, nose, mouth, hand, finger, hair. Talon, beak, feather, fur, skin, trunk, tortoise, shell, scales, claw, wings</p> <p>Loud, quiet.</p> <p>Change, baby, adult, grow, grownup, exercise,</p> <p>See, hear, feel, taste, smell</p> <p>Time, before, now, next, yesterday, tomorrow, when I was younger/ a baby, when my mum/ dad etc was little, animal, larvae, pupae, cocoon, caterpillar, growing, insect, talons, wings, care, careful,</p>	<p>Neck, elbows, eyebrows, eyelashes, teeth, tongue, feet, toes, nails, ankle, calf, thigh, hips, waist, trunk, chest, shoulders, back, wrist, tail, wing, fin, scales, senses, hearing, seeing, touching, smelling, tasting, smooth, bright, dim, high, low</p> <p>Fish, reptiles, mammals, birds, amphibians (+ examples of each)</p> <p>herbivore, omnivore, carnivore, blood, heart, lungs, bones, muscles, senses, taste, smell, sight, hear, touch</p>	<p>Survival, water, air, food, adult, offspring, kitten, calf, puppy, hygiene, balanced diet, offspring, life cycles, adults, basic needs, water, food, air, food types (fruit and veg, bread, rice, pasta, milk, dairy, foods high in fat and sugar, meat, fish, eggs, beans)</p>
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<b>Plants</b>	<p>3-4 year olds</p> <p>Understanding the World</p> <ul style="list-style-type: none"> <li>• Plant seeds and care for growing plants</li> <li>• Understand the key features of the life cycle of a plant and an animal</li> <li>• Begin to understand the need to respect and care for living things</li> </ul>	<p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees.</p>	<p>Observe and describe how seeds and bulbs grow into mature plants</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p>
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### Cumulative Vocabulary

<b>Vocabulary</b>	<p>Seed, pip, plant, stalk, leaves, flower, fruit, soil, vegetable, water, decomposing, sunlight, decay</p> <p>Observational drawing</p>	<p>Names of: wild plants, garden pants, flowering plants. Tree, leaf, flower, blossom, root, petal, fruit, seed, trunk, branch, stem, bark, stalk.</p>	<p>Bulb, light, needs, growth, healthy, dieing, shoot, seedling, tuber, temperature, growth, lifecycle, oxygen, carbon dioxide, seasonal,</p>
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		deciduous and evergreen, pollen, nectar, habitat Vegetable (various names) Fruit (various names) Tree's on site: London Plain, maple cherry, fir. Magnolia, Horse Chestnut Garden plants; Rose, daisy, dandelion, sunflower,	annual, environment
<b>Living things and their habitats Yr 2</b>	<p>3-4 year olds Understanding the World</p> <ul style="list-style-type: none"> <li>• Begin to understand the need to respect and care for the natural environment and all living things</li> </ul> <p>4-5 year olds Understanding the World</p> <ul style="list-style-type: none"> <li>• Explore the natural world around them</li> <li>• Describe what they see, hear and feel while they are outside</li> <li>• Recognise some of the events that are different to the one in which they live</li> <li>• Understand the effect of changing seasons on the natural world around them</li> </ul>		<ul style="list-style-type: none"> <li>• Explore and compare the differences between things that are living, dead, and things that have never been alive.</li> <li>• Identify that most living things live in habitats to which they are suited and describe how</li> <li>• different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. Identify and name a variety of plants and animals in their</li> <li>• habitats, including micro</li> <li>• habitats.</li> <li>• Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food</li> </ul>
<b>Cumulative Vocabulary</b>			
<b>Vocabulary</b>	Rubbish, care, animal, plant, same	Features, tail, tusk, horn, aquatic,	Living, dead, never been alive,

	different, tell, season, food, predator, water	forest, ocean, mountain	names of local habitats grass, pond, woodland, meadow, name micro habitat, under log, stony path, under bushes, suited, basic needs, depend, food, food chain, shelter, energy, food chain, prey, desert, food web, oxygen, carbon dioxide, seasonal, annual, environment
<b>Seasonal Changes</b>	<p>Understanding the World</p> <ul style="list-style-type: none"> <li>Explore the natural world around them</li> </ul>	Observe changes across the four seasons - observe and describe weather associated with the seasons and how day length varies.	
<b>Cumulative Vocabulary</b>			
	Season, spring, summer, autumn, winter, wind, rain, snow, sun, rainbow, cloud, day, night, light, dark, ice, freezing, hot	Weather, warm, cool cold, sunny, cloudy, rainy, snowing, hailing, sleet, frost, fog, mist, icy, rainbow, thunder, lightning, storm, light, dark, day, night, moon, dry season, monsoon/ rainy season, drought, polar ice	
<b>Everyday materials YR1</b> <b>Uses of everyday materials YR2</b>	<p>3-4 year olds</p> <p>Understanding the World</p> <ul style="list-style-type: none"> <li>Use all their senses in hands-on exploration of natural materials</li> <li>Explore collections of materials with similar and/ or different properties</li> <li>Explore and talk about different forces they can feel</li> <li>Talk about the differences between materials and changes they notice</li> </ul>	<ul style="list-style-type: none"> <li>Distinguish between an object and the material from which it is made.</li> <li>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</li> <li>Describe the simple physical properties of a variety of everyday materials.</li> <li>Compare and group together a variety of everyday materials on the basis of their simple</li> </ul>	<ul style="list-style-type: none"> <li>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul>

		physical properties.	
<b>Cumulative Vocabulary</b>			
<b>Vocabulary</b>	Wind, push, pull, hard, soft, change, melt, magnet, up, down, ice, melting, and lots of descriptive language too.	Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, cardboard, rubber, wool, clay, stretchy, stiff, bendy, waterproof, tear, rough, smooth, shiny, dull, see through, not see through, properties, objects, recycling.	Suitable/unsuitable, use, absorbent, transparent, translucent, opaque, shape, change, twist, squash, bend, stretch, roll, squeeze, opaque, absorbent, opaque, transparent, brick, man made, natural, resilient, compare,