






# Science Curriculum Progression Map



NC Topic	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Working Scientifically</b>							
<p><b>Observation over time</b></p> 	<p>Know that observation is a key skill of a scientist.</p> <p>Know that comparisons can be made through observation.</p>	<p>Know that changes can be recorded through observation.</p> <p>Know that observations can be made using simple equipment.</p>	<p>Know that equipment can be selected to observe change over time.</p> <p>Know that observations can be measured.</p>	<p>Know that observations need to be careful and systematic.</p> <p>Know that measurements can be taken using a range of equipment.</p> <p>Know that a range of bar charts, tables and pictograms are used to show measurements.</p>	<p>Know that choices can be made on what to observe and how to measure it.</p> <p>Know that standard units of time in minutes and seconds can be used when accurately observing.</p>	<p>Know that repeated and precise recordings must be taken.</p> <p>Know that data can be gathered, recorded, classified and presented in a variety of ways which include scientific diagrams and labels, keys, graphs and tables.</p>	<p>Know that observations require: identifying the measurements required, selecting the equipment needed and taking precise readings.</p> <p>Know that the correct units must be used when measuring accurately and precisely.</p> <p>Know that the interval and range can be taken from a set of observations.</p>
<p><b>Comparative and fair testing</b></p> 	<p>Know that we can investigate different areas of science practically.</p> <p>Know that objects, materials and living things can be explored scientifically.</p>	<p>Know that simple tests can be carried out with support.</p> <p>Know that predictions can be made.</p>	<p>Know that simple tests can be carried out independently.</p> <p>Know that explanations can be made based on what has happened during an investigation.</p>	<p>Know that comparative tests can be carried out.</p> <p>Know that an investigation includes simple, practical enquiries.</p>	<p>Know that fair tests can be carried out.</p> <p>Know that there is more than one variable factor.</p>	<p>Know that results can lead to further prediction and the design of further comparative tests.</p> <p>Know that some variables need to be controlled.</p> <p>Know that methods can be improved.</p>	<p>Know that there are explanations behind needing to control variables.</p> <p>Know that there are reasons for improving methods.</p>

<p><b>Research</b></p> 	<p>Know that questions can be asked to find answers.</p>	<p>Know that simple secondary sources can be used to find answers.</p>	<p>Know that questions can be researched to find answers.</p>	<p>Know that questions can be researched to find answers using secondary sources.</p>	<p>Know that answers to questions using secondary sources can be reported in different ways.</p>	<p>Know that research can be presented in different formats.</p>	<p>Know that research can be presented using different formats, selecting the best format for the information being shared.</p>
<p><b>Pattern Seeking</b></p> 	<p>Know that patterns exist within scientific phenomena.</p>	<p>Know that patterns can be identified within scientific phenomena.</p>	<p>Know that relationships can be identified within scientific phenomena.</p>	<p>Know that patterns can be naturally occurring.</p> <p>Know that conclusions can be formed based on findings.</p>	<p>Know that patterns can be identified in results.</p> <p>Know that patterns can be identified through data collection.</p>	<p>Know that causal relationships can be identified.</p> <p>Know that data can be interpreted to find patterns.</p>	<p>Know that patterns can be found in the natural environment.</p> <p>Know that evidence can support / refute causal relationships.</p>
<p><b>Identifying, grouping and classifying</b></p> 	<p>Know that living and non-living things can be classified.</p>	<p>Know that living and non-living things can be classified and compared.</p>	<p>Know that living and non-living things can be classified and compared through methods of sorting and grouping.</p>	<p>Know that identified criteria will determine how living and non-living things are classified.</p> <p>Know that keys can be used when grouping, sorting and classifying.</p>	<p>Know that scientific ideas and processes determine how living and non-living things are classified and sorted.</p>	<p>Know that detailed classification models can be used to sort living and non-living things.</p>	<p>Know that own classification methods can be chosen and developed in order to sort living and non-living things.</p>
<b>Key Vocabulary</b>							
	<p>look closely, observe, watch, touch, feel, smell, listen, same, different, compare, ask questions, record, sort, group</p>	<p>observe, changes, patterns, grouping, sorting, compare, same, different, identify (name), measure, data, record results, drawing, picture, table, tally chart, present, pictogram, block chart, Venn diagram, ask questions, test, investigate, explore, equipment, resources, magnifying glass, hand lens, ruler, tape measure, metre stick, pipette, syringe, spoon, teaspoon, answer questions, interpret results, scientific enquiry, pattern seeking, comparative testing, observing over time, classifying, researching using secondary sources</p>	<p>practical work, fair testing, relationships, accurate, thermometer, data logger, stopwatch, timer, estimate, data, diagram, identification key, chart, bar chart, prediction, similarity, difference, evidence, information, findings, criteria, values, properties, characteristics, conclusion, explanation, reason, evaluate, improve</p>	<p>variables, independent variable, dependent variable, control variable, evidence, justify, argument (science), causal relationship, accuracy, precision, scatter graphs, bar graphs, line graphs, force meter</p>			



# Science Curriculum Progression Map: EYFS



NC content	Foundation 1	Foundation 2
<p><b>Understanding the world: The natural world</b></p> <p>ELG: Explore the natural world around them, making observations and drawing pictures of animals and plants, know some similarities and differences between the natural world around them and contrasting environments, drawings on their experiences and what has been read in class, understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	<ul style="list-style-type: none"> <li>• Enjoys playing with small-world models such as a farm, a garage, or a train track.</li> <li>• Notices detailed features of objects in their environment.</li> <li>• Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.</li> <li>• Can talk about some of the things they have observed such as plants, animals, natural and found objects.</li> <li>• Talks about why things happen and how things work.</li> <li>• Developing an understanding of growth, decay and changes over time.</li> <li>• Shows care and concern for living things and the environment.</li> <li>• Use observational equipment (magnifying glasses &amp; microscopes) to observe and talk about things they see</li> <li>• Make observations of what they can hear, see, feel in their immediate environment</li> <li>• Notices change in their immediate environment – wind pick up or getting too hot</li> </ul>	<ul style="list-style-type: none"> <li>• Use observational equipment (magnifying glasses &amp; microscopes) to observe and talk about things they see with peers</li> <li>• Takes part in a simple experiment led by an adult (floating &amp; sinking) discussing the what they observed &amp; offering reasons</li> <li>• Take simple predictions with support</li> <li>• Observes and talks about changes over time (melting ice)</li> <li>• Make simple predictions &amp; explain why they think that will happen</li> <li>• Carries out a simple pre-set-up experiment (sorting materials with magnets) that enables them to talk about similarities and differences – classifying</li> <li>• Records observations in a number of ways; drawing, labelling, photographs, writing</li> <li>• Make observations of what they can hear, see, feel in their immediate environment</li> <li>• Notices change in their immediate environment – wind pick up or getting too hot</li> <li>• Knows the names of the seasons of the year and is starting to describe the differences between them</li> <li>• Knows the names of the seasons of the year, can describe the differences between them &amp; the impact they have on our lives – clothing, recreation, etc</li> <li>• Records observations in a number of ways; drawing, labelling, photographs, writing to go back and discuss changes that have occurred</li> <li>• Compares, contrasts &amp; shows an awareness of the passing of time through the changes in plants and animals, incl humans, though life cycles</li> </ul>

# Science Curriculum Progression Map



NC Topic	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<h2>Plants</h2>	<ul style="list-style-type: none"> <li>○ Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</li> <li>○ Identify and describe the basic structure of a variety of common flowering plants, including trees.</li> </ul>	<ul style="list-style-type: none"> <li>○ Observe and describe how seeds and bulbs grow into mature plants.</li> <li>○ Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</li> <li>○ <i>Identify and name a variety of plants and animals in their habitats, including microhabitats.</i> <i>(Y2 - Living things and their habitats)</i></li> </ul>	<ul style="list-style-type: none"> <li>○ Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.</li> <li>○ Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.</li> <li>○ Investigate the way in which water is transported within plants.</li> <li>○ Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li> </ul>	<ul style="list-style-type: none"> <li>○ <i>Recognise that living things can be grouped in a variety of ways.</i></li> <li>○ <i>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</i></li> <li>○ <i>Recognise that environments can change and that this can sometimes pose dangers to living things.</i> <i>(Y4 - Living things and their habitats)</i></li> </ul>	<ul style="list-style-type: none"> <li>○ <i>Describe the life process of reproduction in some plants and animals.</i> <i>(Y5 - Living things and their habitats)</i></li> </ul>	<ul style="list-style-type: none"> <li>○ <i>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</i></li> <li>○ <i>Give reasons for classifying plants and animals based on specific characteristics.</i> <i>(Y6 - Living things and their habitats)</i></li> </ul>
<b>Key Vocabulary</b>						
plant, leaf, stem, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil, names of plants they grow, tree, bush, herb, names of plants they see	leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, names of trees in the local area, names of garden and wild flowering plants in the local area, ight, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling names of plants in local habitats and micro-habitats	photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil, absorb, transport, classification, classification keys	life cycle, reproduce, sexual, fertilises, asexual, plantlets, runners, tubers, cuttings	flowering, non-flowering, mosses, ferns, conifers		

NC Topic	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p style="text-align: center;"><b>Living things and their Habitats</b></p> <p style="text-align: center;"><b>Seasonal Change</b></p>	<ul style="list-style-type: none"> <li>○ <i>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</i></li> <li>○ <i>Identify and describe the basic structure of a variety of common flowering plants, including trees.</i> (Y1 - Plants)</li> <li>○ <i>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</i></li> <li>○ <i>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</i></li> <li>○ <i>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</i> (Y1 - Animals including humans)</li> <li>○ <i>Observe changes across the four seasons.</i></li> <li>○ <i>Observe and describe weather associated with the seasons and how day length varies</i></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 different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</li> <li>○ Identify and name a variety of plants and animals in their habitats, including microhabitats.</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> <li>○ <i>Notice that animals, including humans, have offspring which grow into adults.</i> (Y2 - Animals including humans)</li> </ul>	<ul style="list-style-type: none"> <li>○ <i>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</i> (Y3 - Plants)</li> <li>○ <i>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</i> (Y3 - Light)</li> </ul>	<ul style="list-style-type: none"> <li>○ Recognise that living things can be grouped in a variety of ways.</li> <li>○ Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</li> <li>○ Recognise that environments can change and that this can sometimes pose dangers to living things.</li> <li>○ <i>Construct and interpret a variety of food chains, identifying producers, predators and prey.</i> (Y4 - Animals, including humans)</li> </ul>	<ul style="list-style-type: none"> <li>○ Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</li> <li>○ Describe the life process of reproduction in some plants and animals.</li> <li>○ <i>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.</i> (Y5 - Earth and space)</li> </ul>	<ul style="list-style-type: none"> <li>○ <i>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals.</i></li> <li>○ <i>Give reasons for classifying plants and animals based on specific characteristics.</i></li> <li>○ <i>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</i></li> <li>○ <i>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</i> (Y6 - Evolution and inheritance)</li> </ul>

**Key Vocabulary**

<p>plant, tree, bush, flower, vegetable, herb, weed, animal, names of plants and animals they see, name of a contrasting environment (e.g. beach, forest)</p>	<p>weather, sunny, rainy, raining, shower, windy, snowy, cloudy, hot, warm, cold, storm, thunder, lightning, hail, sleet, snow, icy, frost, puddles, rainbow, seasons, winter, summer, spring, autumn, Sun, sunrise, sunset, day length</p>	<p>living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats (e.g. pond, woodland etc.), names of micro-habitats (e.g. under logs, in bushes etc.), conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and micro-habitats studied</p>	<p>photosynthesis, pollen, insect/wind pollination, male, female, seed formation, seed dispersal (e.g. wind dispersal, animal dispersal, water dispersal), air, nutrients, minerals, soil, absorb, transport</p>	<p>classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate</p>	<p>life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, cuttings</p>	<p>vertebrates, fish, amphibians, reptiles, birds, mammals, warm-blooded, cold-blooded, invertebrates, insects, spiders, snails, worms, flowering, non-flowering, mosses, ferns, conifers</p>
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NC Topic	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p style="text-align: center;"><b>Animals, including Humans</b></p>	<ul style="list-style-type: none"> <li>○ Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li> <li>○ Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li> <li>○ Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</li> <li>○ Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li> </ul>	<ul style="list-style-type: none"> <li>○ Notice that animals, including humans, have offspring which grow into adults.</li> <li>○ Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</li> <li>○ Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</li> <li>○ <i>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.</i> (Y2 - Living things and their habitats)</li> </ul>	<ul style="list-style-type: none"> <li>○ Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</li> <li>○ Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</li> </ul>	<ul style="list-style-type: none"> <li>○ Describe the simple functions of the basic parts of the digestive system in humans.</li> <li>○ Identify the different types of teeth in humans and their simple functions.</li> <li>○ Construct and interpret a variety of food chains, identifying producers, predators and prey.</li> </ul>	<ul style="list-style-type: none"> <li>○ Describe the changes as humans develop to old age.</li> <li>○ <i>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</i></li> <li>○ <i>Describe the life process of reproduction in some plants and animals.</i> (Y5 - Living things and their habitats)</li> </ul>	<ul style="list-style-type: none"> <li>○ Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</li> <li>○ Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</li> <li>○ Describe the ways in which nutrients and water are transported within animals, including humans.</li> <li>○ <i>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</i></li> <li>○ <i>Give reasons for classifying plants and animals based on specific characteristics.</i> (Y6 - Living things and their habitats)</li> </ul>

### Key Vocabulary

<p>names of animals, live, on land, in water, jungle, desert, North Pole, South Pole, sea, hot, cold, wet, dry, snow, ice, hair (e.g. black, brown, dark, light, blonde, ginger, grey, white, long, short, straight, curly), eyes (e.g. blue, brown, green, grey), skin (e.g. black, brown, white), big/tall, small/short, bigger/smaller, baby, toddler, child, adult, old person, old, young, brother, sister, mother, father, aunt, uncle, grandmother, grandfather, cousin, friend, family, boy, girl, man, woman</p>	<p>head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, names of animals experienced first-hand from each vertebrate group, parts of the human body including those within the school's RSE policy, senses, touch, see, smell, taste, hear, fingers, skin, eyes, nose, ears, tongue</p>	<p>offspring, reproduction, growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies (e.g. chick/chicken, kitten/cat, caterpillar/butterfly), survive, survival, water, food, air, exercise, heartbeat, breathing, hygiene, germs, disease, food types (e.g. meat, fish, vegetables, bread, rice, pasta, dairy)</p>	<p>nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect, move, skull, ribs, spine</p>	<p>digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, large intestine, rectum, anus, incisor, canine, molar, premolar, herbivore, carnivore, omnivore, producer, predator, prey</p>	<p>puberty, the vocabulary to describe sexual characteristics</p>	<p>heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, cycle, circulatory system, diet, drugs, lifestyle</p>
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NC Topic	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Evolution and inheritance</b></p> <p><b>Rocks</b></p>	<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 physical properties.</li> </ul> <p><i>(Y1 - Everyday materials)</i></p>	<ul style="list-style-type: none"> <li>○ Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</li> </ul> <p><i>(Y2 - Living things and their habitats)</i></p> <ul style="list-style-type: none"> <li>○ Notice that animals, including humans, have offspring which grow into adults.</li> </ul> <p><i>(Y2 - Animals, including humans)</i></p> <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> </ul> <p><i>(Y2 - Uses of everyday materials)</i></p>	<ul style="list-style-type: none"> <li>○ Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li> </ul> <p><i>(Y3 - Plants)</i></p> <ul style="list-style-type: none"> <li>○ Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</li> <li>○ Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</li> <li>○ Recognise that soils are made from rocks and organic matter.</li> </ul>	<ul style="list-style-type: none"> <li>○ Recognise that environments can change and that this can sometimes pose dangers to living things.</li> </ul> <p><i>(Y4 - Living things and their habitats)</i></p>	<ul style="list-style-type: none"> <li>○ Describe the life process of reproduction in some plants and animals.</li> </ul> <p><i>(Living things and their habitats - Y5)</i></p>	<ul style="list-style-type: none"> <li>○ Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</li> <li>○ Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</li> <li>○ Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</li> </ul>
<b>Key Vocabulary</b>						
			rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorbs water, fossil, bone, flesh, minerals, marble, chalk, granite, sandstone, slate, types of soil (e.g. peaty, sandy, chalky, clay)			offspring, sexual reproduction, vary, characteristics, adapted, inherited, species, evolve, evolution

NC Topic	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<h1>Materials</h1>	<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 physical properties.</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>	<ul style="list-style-type: none"> <li>○ <i>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</i></li> <li>○ <i>Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</i> (Y3 - Rocks)</li> <li>○ <i>Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</i> (Y3 - Forces and magnets)</li> </ul>	<ul style="list-style-type: none"> <li>○ Compare and group materials together, according to whether they are solids, liquids or gases.</li> <li>○ Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).</li> <li>○ Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> <li>○ <i>Recognise some common conductors and insulators, and associate metals with being good conductors.</i> (Y4 - Electricity)</li> </ul>	<ul style="list-style-type: none"> <li>○ Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.</li> <li>○ Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</li> <li>○ Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</li> <li>○ Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</li> <li>○ Demonstrate that dissolving, mixing and changes of state are reversible changes.</li> <li>○ Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</li> <li>○</li> </ul>	

**Key Vocabulary**

mix, stir, cook, hot, oven, microwave, change, burn, melt, hard, runny, set, freeze, freezer, cold, blended, hard, soft, bendy, stiff, wobbly, wood, plastic, paper, card, fabric, ice, water, frozen, icicle, snow, melt, wet, cold, slippery, smooth, big, bigger, biggest, smaller, smaller, smallest, hard, soft, bendy, rigid, wood, plastic, paper, card, metal, strong, weak, hot, apply heat, waterproof, soggy, not waterproof, best, change, change back

object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through, opaque, transparent, translucent, reflective, non-reflective, flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching

solid, liquid, gas, heating, cooling, state change, melting, freezing, melting point, boiling, boiling point, evaporation, condensation, temperature, water cycle

thermal insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material

NC Topic		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Light</b>		<ul style="list-style-type: none"> <li>○ <i>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</i> <i>(Y1 - Animals, including humans)</i></li> <li>○ <i>Describe the simple physical properties of a variety of everyday materials.</i> <i>(Y1 - Materials)</i></li> </ul>		<ul style="list-style-type: none"> <li>○ Recognise that they need light in order to see things and that dark is the absence of light.</li> <li>○ Notice that light is reflected from surfaces.</li> <li>○ Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</li> <li>○ Recognise that shadows are formed when the light from a light source is blocked by an opaque object.</li> <li>○ Find patterns in the way that the size of shadows change.</li> </ul>		<ul style="list-style-type: none"> <li>○ <i>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.</i> <i>(Y5 - Properties and changes of materials)</i></li> </ul>	<ul style="list-style-type: none"> <li>○ Recognise that light appears to travel in straight lines.</li> <li>○ Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.</li> <li>○ Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.</li> <li>○ Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</li> </ul>
		<b>Key Vocabulary</b>					
	light, torch, bulb, lamp, spotlight, shiny, bright, brighter, brightest, Sun, shine, glow, mirror, Sun, sunny, light, shadow, shady, clouds, torch, see-through, not see-through, source, light source			light, light source, dark, absence of light, surface, shadow, reflect, mirror, Sun, sunlight, dangerous			straight lines, light rays

NC Topic	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Forces</b>		<ul style="list-style-type: none"> <li>○ <i>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</i></li> </ul> <p><i>(Y2 - Uses of everyday materials)</i></p>	<ul style="list-style-type: none"> <li>○ Compare how things move on different surfaces.</li> <li>○ Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</li> <li>○ Observe how magnets attract or repel each other and attract some materials and not others.</li> <li>○ Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</li> <li>○ Describe magnets as having two poles.</li> <li>○ Predict whether two magnets will attract or repel each other, depending on which poles are facing.</li> </ul>		<ul style="list-style-type: none"> <li>○ Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</li> <li>○ Identify the effects of air resistance, water resistance and friction that act between moving surfaces.</li> <li>○ Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect</li> </ul>	
<b>Key Vocabulary</b>						
object, float, sink, water, up, down, top, bottom, push, pull, magnet, spring, squash, bend, twist, stretch, turn, spin, smooth, rough, fast, slow, float, sink, up, down, top, bottom, surface, move, roll, drop, fly, turn, spin, fall, fast, slow, faster, slower, fastest, slowest, further, furthest, wind, air, water, blow, bounce			force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole		force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears	

NC Topic	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Sound</b>	<ul style="list-style-type: none"> <li>○ <i>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</i></li> </ul> <p><i>(Y1 - Animals, including humans)</i></p>			<ul style="list-style-type: none"> <li>○ Identify how sounds are made, associating some of them with something vibrating.</li> <li>○ Recognise that vibrations from sounds travel through a medium to the ear.</li> <li>○ Find patterns between the pitch of a sound and features of the object that produced it.</li> <li>○ Find patterns between the volume of a sound and the strength of the vibrations that produced it.</li> <li>○ Recognise that sounds get fainter as the distance from the sound source increases.</li> </ul>		
<b>Key Vocabulary</b>						
<p>sound, noise, loud, quiet, high, low, music, bang, blow, pluck, soft, hard, fast, slow, names of instruments, , listen, hear, music, voices, bird song, traffic, sirens, thunder, high, low, loud, quiet, soft, volume, crackle, thunder, hum, buzz, roar</p>				<p>sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, quiet, loud, insulation</p>		

NC Topic	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Electricity</b>				<ul style="list-style-type: none"> <li>○ Identify common appliances that run on electricity.</li> <li>○ Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</li> <li>○ Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.</li> <li>○ Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.</li> <li>○ Recognise some common conductors and insulators, and associate metals with being good conductors.</li> </ul>		<ul style="list-style-type: none"> <li>○ Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</li> <li>○ Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.</li> <li>○ Use recognised symbols when representing a simple circuit in a diagram.</li> </ul>
<b>Key Vocabulary</b>						
battery, plug, socket, electricity, wire, sound, light, move				electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol		circuit diagram, circuit symbol, voltage

NC Topic	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Earth and Space</b></p>	<ul style="list-style-type: none"> <li>○ <i>Observe changes across the four seasons.</i></li> <li>○ <i>Observe and describe weather associated with the seasons and how day length varies.</i></li> </ul> <p><i>(Y1 – Seasonal changes)</i></p>				<ul style="list-style-type: none"> <li>○ Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</li> <li>○ Describe the movement of the Moon relative to the Earth.</li> <li>○ Describe the Sun, Earth and Moon as approximately spherical bodies.</li> <li>○ Use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky.</li> </ul>	
	<b>Key Vocabulary</b>					
<p>Sun, Moon, Earth, star, planet, sky, day, night, space, round, bounce, float</p>					<p>Sun, Moon, Earth, planets (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, Solar System, rotate, star, orbit</p>	

2025/26	Term	Holbeck (R)	Holbeck (Y1)		Sherwood (Y1/2/3)	Langwith (Y3/4)	Welbeck (Y5/6)	
CYCLE A	Aut1	ELG: Explore the natural world around them, making observations and drawing pictures of animals and plants, know some similarities and differences between the natural world around them and contrasting environments, drawings on their experiences and what has been read in class, understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	Seasonal change (ongoing through year)	Animals, including humans (all about me).	Seasonal change Y1 (ongoing through year)	Uses of everyday materials Forces and magnets (Y3)	Animals, including humans (Y5)	
	Aut2			Everyday materials.		Living things and their habitats	Light (Y3)	Properties of materials (Y5)
	Spr1			Science Tots (variety of coverage).		Light (Y3)	Animals, including humans (digestive system) (Y4)	Earth and space (Y5)
	Spr2			Everyday materials (building- three little pigs).		Plants	Living things and their habitats (Y4)	Living things and their habitats (Y5)
	Sum1			Plants.		Animals, including humans (growth)	States of matter (Y4)	Changes of materials (Y5)
	Sum2			Animals, including humans (all about animals).		Animals, including humans (life cycles)	Living things and their habitats- conservation (Y4)	Light (Y6)
2026/27	Term	Holbeck (R)	Holbeck (Y1)		Sherwood	Langwith (Y3/4)	Welbeck (Y5/6)	
CYCLE B	Aut1	ELG: Explore the natural world around them, making observations and drawing pictures of animals and plants, know some similarities and differences between the natural world around them and contrasting environments, drawings on their experiences and what has been read in class, understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	Seasonal change (ongoing through year)	Animals, including humans (all about me).	Seasonal change Y1 (ongoing through year)	TBC	Scientific enquiry (Y3)	Animals, including humans (Y6)
	Aut2			Everyday materials.		TBC	Rocks (Y3)	Forces (Y5)
	Spr1			Science Tots (variety of coverage).		TBC	Animals, including humans (skeletons) (Y3)	Electricity (Y6)
	Spr2			Everyday materials (building- three little pigs).		TBC	Plants (Y3)	Living things and their habitats (Y6)
	Sum1			Plants.		TBC	Electricity (Y4)	Evolution and inheritance (Y6)
	Sum2			Animals, including humans (all about animals).		TBC	Sound (Y4)	Looking after our environment (Y6)