


































# Science LTP - Morland Area CE 2025-26

Two-year rolling programme  
Year A = Year 1, 3 and 5 coverage



Biology			Chemistry	Physics		
 <b>Working Scientifically</b> 						
EYFS	<b>People and communities</b> 			<b>Understanding the world</b> 	<b>The World</b> 	
Y1	<b>Plants</b> 		<b>Animals including humans</b> 	<b>Materials</b> 	<b>Seasonal changes</b> 	
Y2	<b>Animals including Humans</b> 	<b>Plants</b> 	<b>Living things and their habitats</b> 	<b>Materials</b> 		
Y3	<b>Plants</b> 		<b>Animals incl. Humans</b> 	<b>Rocks</b> 	<b>Light</b> 	<b>Forces</b> 
Y4	<b>Animals including Humans</b> 		<b>Living things and their habitats</b> 	<b>States of matter</b> 	<b>Sound</b> 	<b>Electricity</b> 
Y5	<b>Animals including Humans</b> 			<b>Everyday materials</b> 	<b>Earth and space</b> 	<b>Forces</b> 
Y6	<b>Animals including Humans</b> 	<b>Living things and their habitats</b> 	<b>Evolution and inheritance</b> 		<b>Light</b> 	<b>Electricity</b> 

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### EYFS: Natural World (People and Communities & The World)

<b>Natural World</b>	<ul style="list-style-type: none"> <li>Explore the natural world, make observations and draw pictures of animals and plants.</li> <li>Know some similarities and differences between our own environment and others - draw on experiences and information read in class.</li> <li>Understand the effects of changing seasons on the world around us.</li> </ul>				
<b>Working Scientifically Taught through the topics</b>	<ul style="list-style-type: none"> <li>Ask questions</li> <li>Talk about what is being done in order to answer their questions</li> <li>Make observations</li> <li>Talk about why things happen</li> <li>Talk about changes</li> </ul>				
<b>EYFS</b>	<b>Plants</b>	<b>Animals and Humans</b>	<b>Living things and Habitats</b>	<b>Everyday Materials</b>	<b>Seasonal Changes</b>
<b>Nursery</b>	<ul style="list-style-type: none"> <li>Explore plants and seeds and discuss their similarities and differences</li> </ul>	<ul style="list-style-type: none"> <li>Make observations of animals.</li> <li>Explain why something occurs and talk about the change.</li> </ul>	<ul style="list-style-type: none"> <li>Talk about their own environment,</li> </ul>	<ul style="list-style-type: none"> <li>Explore a variety of materials and discuss their properties.</li> <li>Collect various objects from the outdoor environment and allow children to explore and play with them (stones, wood, bricks)</li> </ul>	<ul style="list-style-type: none"> <li>To discuss how day changes to night.</li> </ul>
<b>Reception</b>	<ul style="list-style-type: none"> <li>Explore the different parts of a plant.</li> <li>To discuss where some foods come from.</li> </ul>	<ul style="list-style-type: none"> <li>Identify some common animals and categorise. E.g. pets, farm, under the sea, jungle etc.</li> <li>Label some simple parts of the human body and associated senses.</li> </ul>	<ul style="list-style-type: none"> <li>Explore plants from the local environment and their features.</li> </ul>	<ul style="list-style-type: none"> <li>Identify some common materials and compare and describe.</li> </ul>	<ul style="list-style-type: none"> <li>Talk about changes in the different seasons</li> </ul>
<b>Key Vocabulary</b>	<b>Petal, Colours, Leaves, Stem.</b>	<b>Move, Walk, Run, Fly, Crawl</b>	<b>Shelter, Food, Water, Warmth, Same, Different,</b>	<b>Same, Different, Touch, Use. Soil, Rock, Stone Brick, Plastic, Cardboard, Metal, Wood, Glass, Hard, Soft</b>	<b>Day, Night, Hot, Cold. Rain, Snow, Sun, Moon, Stars, Clouds, Summer, Spring, Autumn, Winter</b>

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## Class 2 (Year 1) Year A 2025-2026

Objectives	Topic	Key Scientists	Vocabulary	
<b>Autumn 1</b> <ul style="list-style-type: none"> <li>observe changes across the four seasons</li> <li>observe and describe weather associated with the seasons and how day length varies</li> </ul>	<b>Seasonal changes and weather</b>		<b>Tier 2</b> Property, Particle, Separate, Combine, Recover, Comparative	<b>Tier 3</b> Atom, Molecule, Chemical (changes), Physical (changes), Reversible, Reaction
<b>Autumn 2</b> <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>	<b>Everyday Materials</b>	Charles Mackintosh - Inventor of the waterproof raincoat.	<b>Tier 2</b> Absorb, Rough, Smooth, Waterproof, Metal, Plastic	<b>Tier 3</b> Materials, Properties, Flexible, Transparent, Opaque, Physical
<b>Spring 1</b> <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> </ul>	<b>Animals inc. humans</b>	George Mottershead (founded Chester zoo)	<b>Tier 2</b> Blood, Senses, Young, Feathers, Fur, Scales	<b>Tier 3</b> Mammal, Amphibian, Reptile, Herbivore, Carnivore, Omnivore
<b>Spring 2</b>	<b>Plants inc trees</b>	Natural England/Cliburn Moss	<b>Tier 2</b>	<b>Tier 3</b>

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<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> </ul>			Bud, Trunk, Branch, Bark, Seed, Wild	Nutrients, Stem, Deciduous, Evergreen
<p><b>Summer 1</b></p> <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> </ul>	<b>Revisit Animals inc. Humans</b>	David Attenborough - Wildlife presenter, conservationist, and advocate known for hosting various BBC nature programs and promoting conservation.	<b>Tier 2</b>	<b>Tier 3</b>
<p><b>Summer 2</b></p> <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> </ul>	<b>Revisit Plants</b>	Beatrix Potter - popular children's author and illustrator who made contributions to conservation and mycology.	<b>Tier 2</b>	<b>Tier 3</b>

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## Class 3 (Year 3)

Year A 2025-2026 Objectives	Topic	Key Scientists	Vocabulary	
<p><b>Autumn 1</b></p> <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>	Plants		<p><b>Tier 2</b> Adapt, Essential, Glucose, Transport, Variety, Vital</p>	<p><b>Tier 3</b> Transpiration, Stoma, Pollination, Stamen, Postil, Photosynthesis</p>
<p><b>Autumn 2</b></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>	Rocks and soils	Mary Anning (Fossils collector)	<p><b>Tier 2</b> Cemented, Compacted, Decay, Prehistoric, Soil, Transform</p>	<p><b>Tier 3</b> Fossil, Igneous, Magma, Metamorphic, Minerals, Sedimentary</p>
<p><b>Spring 1</b></p> <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> </ul>	Light	Patricia Bath - Ophthalmologist and inventor, is renowned for her innovative contributions to saving sight through the development of the Laserphaco Probe for cataract treatment.	<p><b>Tier 2</b> Absence, Cast (shadow), Impenetrable, Reflect, Shadow, Source (light)</p>	<p><b>Tier 3</b> Constant, Dependent, Independent, Illuminate, Translucent, Variable</p>

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<ul style="list-style-type: none"> <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>				
<p><b>Spring 2</b></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>	<p><b>Forces and magnets</b></p>	<p>Galileo Galilei/Isaac Newton</p>	<p><b>Tier 2</b> Consequence, Contact, Force, Attract, North, South</p>	<p><b>Tier 3</b> Magnet, Resistance, Friction, Repel, Pole, Magnetic field</p>
<p><b>Summer 1</b></p> <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>	<p><b>Animals including Humans - skeletons/muscle</b></p>	<p>Rosalind Franklin (X Ray and DNA)</p>	<p><b>Tier 2</b> Mineral, Skeleton, Skull, Voluntary, Involuntary, Nerves</p>	<p><b>Tier 3</b> Biceps, Triceps, Vertebrae, Vitamins, Proteins, Carbohydrates</p>
<p><b>Summer 2</b></p> <ul style="list-style-type: none"> <li>compare and group together different kinds of rocks on the basis of their</li> </ul>	<p><b>Revisit and retrieve Rocks and Animals inc humans</b></p>	<p>Mary Anning (Fossils collector)</p>	<p><b>Tier 2</b> Cemented, Compacted, Decay, Prehistoric, Soil, Transform</p>	<p><b>Tier 3</b> Fossil, Igneous, Magma, Metamorphic, Minerals, Sedimentary</p>

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<p>appearance and simple physical properties</p> <ul style="list-style-type: none"><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>				
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Class 4 (Year 5)



Objectives	Topic	Key Scientists	Vocabulary	
<p><b>Autumn 1</b></p> <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> </ul>	<p>Living things and their habitats</p>	<p>Carl Linnaeus - Developed the binomial system of classification of all living things. One of the founders of modern ecology. Maria Merion - early studies and illustrations of insects.</p>	<p><b>Tier 2</b> Deduce, Process, Re-form, Transform, Adolescence, Contrast</p>	<p><b>Tier 3</b> Embryo, Sexual Metamorphosis, Incubate, Biochemical, Fertilisation</p>
<p><b>Autumn 2</b></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>	<p>Earth and space</p>	<p>May Jemison - First black female astronaut to go into space. Served on the Space Shuttle Endeavor for 8 days in September 1992.</p>	<p><b>Tier 2</b> Luminous, Phenomenon, Attraction, Approximately, Relative, Apparent</p>	<p><b>Tier 3</b> Orbit, Axis, Crescent, Gravitational, Waxing, Waning</p>
<p><b>Spring 1</b></p> <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,</li> </ul>	<p>Properties of and changes of Materials</p>	<p>Mary Anderson - Inventor of the windscreen wiper.</p>	<p><b>Tier 2</b> Property, Particle, Separate, Combine, Recover, Comparative</p>	<p><b>Tier 3</b> Atom, Molecule, Chemical (changes), Physical (changes), Reversible, Reaction</p>

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<p>including metals, wood and plastic</p> <ul style="list-style-type: none"> <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> </ul>				
<p><b>Spring 2</b></p> <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>	<p>Forces</p>	<p>Albert Einstein (theory of relativity - forces/gravity and Isaac Newton (gravity) Wilbur and Orville Wright - One of the Inventors of the airplane. Achieved the first powered, controlled, and sustained flight in 1903, revolutionizing human transportation.</p>	<p><b>Tier 2</b> Opposite, Reaction, Advantage, Displace, Weight, Mass</p>	<p><b>Tier 3</b> Pulley, Gear, Pivot, Fulcrum, Lever, Upthrust</p>
<p><b>Summer 1</b></p> <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> </ul>	<p>Retrieve and revisit Living things and their habitats</p>	<p>Carl Linnaeus - Developed the binomial system of classification of all living things. One of the founders of modern ecology. Maria Merion - early studies and illustrations of insects.</p>	<p><b>Tier 2</b> Deduce, Process, Re-from, Transform, Adolescence, Contrast</p>	<p><b>Tier 3</b> Embryo, Sexual Metamorphosis, Incubate, Biochemical, Fertilisation</p>
<p><b>Summer 2</b></p> <ul style="list-style-type: none"> <li>describe the changes as humans develop to old age</li> <li>Pupils should draw a timeline to indicate stages in the growth and development of humans</li> <li>They should learn about the changes experienced in puberty</li> </ul>	<p>Animals inc humans and SRE</p>		<p><b>Tier 2</b> Development, Diverse, Unique, Generation, Mature, Equipped</p>	<p><b>Tier 3</b> Adolescence, Puberty, Gestation, Embryo, Foetus, Womb</p>

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<ul style="list-style-type: none"><li>• Pupils could work scientifically by researching the gestation periods of other animals and comparing them with humans; by finding out and recording the length and mass of a baby as it grows</li></ul>				
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