



Lovers' Lane Primary and Nursery School



Science National Curriculum EYFS and Key stage 1 - Working Scientifically (Disciplinary Knowledge)

EYFS: Understanding the World

Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them – From visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension.

ELG: The Natural World

Children at the expected level of development will:

- 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, drawing 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.

Key Stage 1

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking simple questions and recognising that they can be answered in different ways;
- observing closely, using simple equipment;
- performing simple tests;
- identifying and classifying;
- using their observations and ideas to suggest answers to questions;
- gathering and recording data to help in answering questions.

Science National Curriculum Key stage 2

During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking relevant questions and using different types of scientific enquiries to answer them;
- setting up simple practical enquiries, comparative and fair tests;
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers;
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions;

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- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables;
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions;
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions;
- identifying differences, similarities or changes related to simple scientific ideas and processes; using straightforward scientific evidence to answer questions or to support their findings.

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary;
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate;
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs;
- using test results to make predictions to set up further comparative and fair tests;
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Science National Curriculum EYFS and Key stage 1 – Substantive Knowledge

EYFS: Understanding the World

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ELG: The Natural World

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Key Stage 1

The principal focus of science teaching in key stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos.

'Working scientifically' is described separately in the programme of study (See Working Scientifically Skills Progression) , but must always be taught through and clearly related to the teaching of substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content.

Pupils should read and spell scientific vocabulary at a level consistent with their increasing word-reading and spelling knowledge at key stage 1.

Science National Curriculum Key stage 2

Lower key stage 2 – years 3 and 4

The principal focus of science teaching in lower key stage 2 is to enable pupils to broaden their scientific view of the world around them. They should do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources of information. They should draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

'Working scientifically' is described separately at the beginning of the programme of study, but must always be taught through and clearly related to substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content.

Pupils should read and spell scientific vocabulary correctly and with confidence, using their growing word-reading and spelling knowledge.

Upper key stage 2 – years 5 and 6

The principal focus of science teaching in upper key stage 2 is to enable pupils to develop a deeper understanding of a wide range of scientific ideas. They should do this through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically. At upper key stage 2, they should encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict how the world operates. They should also begin to recognise that scientific ideas change and develop over time. They should select the most appropriate ways to answer science questions using different types of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information.

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Pupils should draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.

'Working and thinking scientifically' is described separately at the beginning of the programme of study, but must always be taught through and clearly related to substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content.

Pupils should read, spell and pronounce scientific vocabulary correctly.

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Science Progression – Working Scientifically (Conceptual) Disciplinary Knowledge

Science Progression – Questioning

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Questioning	Know that a question is a phrase/sentence which asks for information	Know that there are many questions for finding answers	Know that there are questions about the world that can be answered in a range of ways. Know that questions can be tested to see if they are true.	Know that questions can be asked and answered by carrying out a scientific enquiry	Know that relevant scientific questions need to be asked and answered through different types of scientific enquiries	Know how to plan for different types of scientific enquires to answer questions, including recognising and controlling variables when necessary	Know how and when to repeat different types of scientific enquiries to answer questions

Science Progression – Enquiry Planning (Hypothesising)

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Enquiry Planning	know that ideas can be put forward for thinking and talking about	know that ideas can be suggested as what might happen know that plans can be suggested to cause something to happen	Know that a prediction is an informed guess about what will happen Know that a simple numbered method can be used to make a simple enquiry	Know that a hypothesis is as starting point for further scientific enquiry know that relevant predictions are tested in a scientific enquiry	Know that a variable is something that is likely to change, it does not have a fixed pattern Know that different methods can be used to make scientific enquiries	Know that a variable can be used to test a hypothesis Know that a variable is involved to make a meaningful prediction	Know how to choose appropriate variables to a test a hypothesis Know how to use test results to make predictions to set up further comparative and fair tests

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Science Progression – Testing

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Testing	know that a test is a set of tasks	Know that there are tests to find answers to questions	Know that there are different ways to perform a test using simple equipment.	Know how to measure tests accurately using a range of equipment	Know that in a fair test one thing is altered and that thing may change as a result is measured while all other conditions are kept the same.	Know how to accurately use further test measuring devices, including digital and analogue scales, measuring cylinders and beakers Know how and when to repeat tests and measurements	Know which testing equipment to choose to carry out a scientific enquiry Know how to identify conditions that were imperfectly controlled and an explain how these might affect results

Science Progression – Observing (Measuring Patterns)

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Observing	know that what is seen to be happening can be talked about know that changes which are seen to be happening can be talked about	Know that there are ways to observe things closely	Know that observations are made of the world in order to answer questions. Know that simple equipment is used to make observations.	Know that observations can depend on conditions for scientific enquiry	Know that observations for scientific enquires are limited by the accuracy of the measurements and use of equipment.	Know that observations for scientific enquires are limited by the accuracy of the measurements and by an extent to which conditions vary and that repeating enquires, and keeping the conditions as consistent as possible can improve an enquiry	Know how and when to repeat observations for scientific enquiries to vary conditions and make improvements

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Science Progression – Interpreting and Recording Data

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Interpreting and Recording data	<p>Know that recording what has been seen can be through drawing pictures</p> <p>Know that recording the changes which have been seen can be through drawing a series of pictures</p>	Know that there are many ways to record learning	Know that there are non-standard units of measure which can be used to take recordings	<p>Know that information can be gathered in a range of ways - (bar charts and diagrams, observation etc)</p> <p>know how to write a simple scientific enquiry with a provided structure</p> <p>Know that the conclusions of scientific enquiries can lead to further questions</p>	<p>Know that results are used to draw conclusions</p> <p>Know how to write a simple scientific enquiry write-up including an introduction, equipment, a numbered method, results and a conclusion</p>	<p>Know how to write a simple scientific enquiry</p> <p>Know how to record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p>	<p>Know how to independently write a scientific enquiry write up</p> <p>Know how to recognize and remove outliers from a set of data, justifying the removal.</p> <p>Know how to present brief oral findings from an enquiry, speaking clearly and with confidence, using notes where necessary</p>

Science Progression – Conclusions

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Conclusions	Know a conclusion is what has been found out	Know what they have found out and	Know how to interpret results to understand	Know to use results to draw simple conclusions, make	Know to look for changes, patterns, similarities and	Know how to report and present findings from enquiries, including	Know how to draw conclusions based on their data and

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		how they found it out helps to understand what happened in their investigation.	<p>any surprise in the results or not.</p> <p>Know scientists reflect to think about what they have learnt (draw conclusions)</p> <p>Know scientists discuss changes about future investigation.</p>	<p>predictions for new values, suggest improvements and raise further questions.</p> <p>Know to use straightforward scientific evidence to answer questions or to support their findings</p>	<p>differences in their data in order to draw simple conclusions and answer questions.</p> <p>Know how to identify new questions arising from the data, make new predictions and find ways of improving what they have already done.</p>	<p>conclusions, causal relationships and explanations of and degree of trust in results, in oral and written form such as displays and other presentations.</p> <p>Know how to identify scientific evidence that has been used to support or refute ideas or arguments.</p>	<p>observations, use evidence to justify their ideas, use scientific knowledge and understanding to explain their findings.</p> <p>Know how to use test results to make predictions to set up further comparatives and fair tests.</p>
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Science Progression – Vocabulary

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocabulary	Know some language can be grouped by topic	Know and use some simple scientific language	<p>Know and use simple scientific language and some science words.</p> <p>Know and use comparative language – bigger, faster etc</p>	<p>Know how to use scientific language to talk and, later, write about what they have found out.</p> <p>Begin to use comparative and superlative language.</p>	<p>Know how to use relevant scientific language.</p> <p>Know how to read, spell and pronounce scientific vocabulary correctly</p>	Know how to use relevant scientific language and illustrations to discuss, communicate and justify scientific ideas.	<p>Know there is a range of scientific vocabulary and use conventions such as trend, rogue result, support prediction and -er word generalisation</p> <p>Know scientific ideas can describe simple processes.</p> <p>To use the correct science vocabulary</p>



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Science Progression – Research

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Research	Know that answers can be found in books	Know that answers and information can be found in books and by using computers.	Know the difference between a Primary and Secondary source.	Know that not all questions can be answered through practical investigations	Know that they can draw conclusions from the findings of other scientists	Know which secondary sources will be most useful to research their ideas	Know which secondary sources will be most useful to research their ideas.

Science Progression – Understanding (Science Capital)

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Understanding	Know that Science can affect daily life	Know how to talk about how science helps us in our daily lives eg. torches and lights help us see hen it is dark.	Know how to talk about how science helps us in our daily lives eg. torches and lights help us see hen it is dark. Know that science can sometimes be dangerous.	Know which things in science have made our lives better. Know and understand there is some risk in science.	To know which things in science have made our lives better. To know how science is useful in everyday life	Know how scientific ideas have changed over time. Know which parts of our lives rely on science.	Know and be able to explain the positive and negative effects of scientific development.

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Science Progression – Factual Knowledge (Substantive Knowledge)

Science Progression – Animals Including Humans

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Animals Including Humans	<p>Amazing Animals (Sp 1)</p> <ul style="list-style-type: none"> •Know how to take care of animals. •Know comparisons between wild animals and pets. •Know names of their body parts and label them. •Describe and comment on things they have seen whilst outside, including plants and animals. •Know how to draw pictures of the natural world, including 	<p>Know, identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>Know, identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>Know how to describe and compare the structure of a variety of common animals (fish,</p>	<p>Know that animals, Including humans, have offspring which grow into adults</p> <p>Know and explain the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Know and explain the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p>	<p>Know that animals, Including humans, need the right types and amount of nutrition</p> <p>Know that animals cannot make their own food</p> <p>Know that animals get nutrition from what they eat</p> <p>Know that foods have different nutritional properties and are grouped into carbohydrate, protein, fat, fibre, dairy.</p> <p>Know that humans and some other animals have skeletons</p>	<p>Know and identify the basic parts of the digestive system</p> <p>Know the functions of the basic parts of the digestive system in humans</p> <p>Know and identify the different types of teeth in humans and their functions</p> <p>Know what a food chain is and the meanings of key vocabulary (food chain, producer, predator, prey, source)</p>	<p>Know and describe the changes as Humans develop to old age.</p> <p>Know that humans grow and develop with age</p> <p>Know what puberty is</p> <p>Know changes that happen during puberty for boy and for girls</p> <p>Know what pregnancy is and what a gestation period is.</p>	<p>Know and identify and name the main parts of the Human circulatory system, and describe the functions of the heart, blood vessels and blood</p> <p>Know and explain the impact of diet, exercise, drugs and lifestyle on the way their bodies function – breathing/lungs, heart, etc.</p> <p>Know and explain the ways in which nutrients and Water is transported within animals, including</p>

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	<p>animals and plants</p> <ul style="list-style-type: none"> • Know the importance of building a 'Bug Hotel. 	<p>amphibians, reptiles, birds and mammals, including pets)</p> <p>Know, 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>Know that skeletons provide support for the body</p> <p>Know that some animals have hydrostatic skeletons, exoskeletons and endoskeletons and what these terms mean.</p> <p>Know that invertebrates do not have a spine (Backbone)</p> <p>Know that animals have muscles for support, protection and movement.</p>	<p>Know how to construct and interpret a variety of food chains</p>		<p>humans.</p>
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Science Progression – Living things and their Habitats

<u>Key Area</u>	<u>EYFS</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
Living things and their Habitats	<ul style="list-style-type: none"> • Know about and make different environments and habitats for nocturnal Animals 		<p>Know compare the differences between things that are living, dead, and things that have never been alive</p> <p>Know most living things live in habitats to which they are suited and</p>		<p>Know that living things can be grouped in a variety of ways</p> <p>Know what a classification key is and how it works</p> <p>Know how to use</p>	<p>Know the differences between the life cycles of a mammal, an amphibian, an insect and a bird</p> <p>Know and explain the life process of reproduction in some plants and animals</p>	<p>Know that living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including</p>

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			<p>describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other</p> <p>Know and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>Know and explain 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.</p>		<p>classification keys to help group, identify and name a variety of living things in their local and wider environment</p> <p>Know that environments can change and that this can sometimes pose dangers to living things.</p>		<p>microorganisms, plants and animals</p> <p>Know and explain reasons for classifying plants and animals based on specific characteristics</p>
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Science Progression - Materials

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		Everyday materials	Uses of everyday materials	Rocks	States of matter	Properties and changes of materials	
Materials	<ul style="list-style-type: none"> •Know which materials floating and sink. •Know how and describe the difference in building a boat with metallic and non-metallic objects 	<p>Know the difference between objects from the material from which it is made</p> <p>Know, identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p>Know and describe the simple physical properties of a variety of everyday materials: hard/soft, flexible/rigid, waterproof/absorbent.</p> <p>Know differences and similarities</p>	<p>Know and identify a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard.</p> <p>Know, identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</p> <p>Know and compare everyday uses of materials in different places, eg comparing school to home, journey to school, in stories, rhymes and songs, on school visits.</p> <p>Know how the shapes of solid</p>	<p>Know that there are different types of rock: sedimentary, igneous and metamorphic</p> <p>Know that sedimentary rocks are made out of lots of small particles (sediment)</p> <p>Know that igneous rocks from inside the Earth</p> <p>Know that metamorphic rocks were sedimentary rocks that have been changed in some way by high heat, high pressure or high mineral-rich fluids.</p> <p>Know that rocks can be compared and grouped together on the basis of their appearance and</p>	<p>Know, compare and group materials together, according to whether they are solids, liquids or gases</p> <p>Know 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)</p> <p>Know and explain the part played by evaporation and condensation in the water cycle</p>	<p>Know, 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</p> <p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</p> <p>Know and explain how mixtures might be separated, including through filtering, sieving and evaporating</p> <p>Know reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p> <p>Know, explain and demonstrate that dissolving, mixing and</p>	

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		<p>between everyday materials.</p> <p>Know ways to compare and group together a variety of everyday materials on the basis of the simple physical properties.</p>	<p>objects made from some materials can be changed by squashing, bending, twisting and stretching</p> <p>Know about people who have developed useful new materials, eg John Dunlop, Charles Macintosh or John McAdam.</p>	<p>simple physical properties.</p> <p>Know how fossils are formed when things that have lived are trapped within rock (between layers of sedimentary rock).</p> <p>Know that soils are made from rocks and organic matter</p>	<p>Know that the rate of evaporation is associated with temperature.</p>	<p>changes of state are reversible changes</p> <p>Know and 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</p>	
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Science Progression - Plants

Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Plants	<p>Come Outside (Sp 2)</p> <ul style="list-style-type: none"> Describe and comment on things they have seen whilst outside, including plants and animals. Know how to draw pictures of the natural world, including animals and plants 	<p>Know, identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>Know, identify and describe the basic structure of a variety of common flowering plants, including trees.</p>	<p>Know how seeds and bulbs grow into mature plants</p> <p>Know how plants need water, light and a suitable temperature to grow and stay healthy</p>	<p>Know and identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</p> <p>Know what plants need for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant</p>			

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	<ul style="list-style-type: none"> • Know how to discuss how we care for the natural world around us. • Notice changes in the leaves, weather, seasons. 			<p>Know how water is transported within plants</p>			
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Science Progression - Light							
Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Light				<p>Know that they need light in order to see things and that dark is the absence of light</p> <p>Know that light appears to travel in straight lines</p> <p>Know that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye</p> <p>Know that light is reflected from surfaces</p> <p>Know that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>Know that shadows are formed when the light from a light source is blocked by a solid objects.</p> <p>Know, identify and explain patterns in the way that the size of shadows change.</p>			<p>Pupils should be taught to:</p> <p>Know that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes</p> <p>Know that light is reflected from surfaces and that this changes depending on the surface hit</p> <p>Know that light is refracted in water</p> <p>Know that light can be split into the colours of the rainbow (ROYGBIV)</p> <p>Know and explain what a prism is and how it works</p>

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				Know and explain that light travels in straight lines to make shadows have the same shape as the objects that cast them			
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Science Progression - Electricity							
Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Electricity					<p>Know that common appliances run on electricity</p> <p>Know how to construct a simple series electrical circuit, identifying</p> <p>Know the names of electrical components including cells, wires, bulbs, switches and buzzers.</p> <p>Know 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.</p> <p>Know that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.</p> <p>Know some common conductors and insulators, and associate metals with being good conductors.</p>		<p>Know that the brightness of a lamp or the volume of a buzzer is associated with the number and voltage of cells used in the circuit</p> <p>Know and explain reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p>Know and use recognised symbols when representing a simple circuit in a diagram.</p>



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Science Progression – Forces						
Key Area	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5
				Magnets and Forces		Forces
Forces	Know which materials floating and sink.			<p>Know and compare how things move on different surfaces.</p> <p>Know that some forces need contact between 2 objects, but magnetic forces can act at a distance.</p> <p>Know how magnets attract or repel each other and attract some materials and not others.</p> <p>Know ways to 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.</p> <p>Know that magnets have 2 poles.</p> <p>Know whether 2 magnets will attract or repel each other, depending on which poles are facing.</p>		<p>Know that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>Know and explain the effects of air resistance, water resistance and friction, that act between moving surfaces.</p> <p>Know that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.</p>



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Science Progression – Year Group Specific Units

<u>Key Area</u>	<u>EYFS</u>	<u>Year 1</u> Seasonal Changes	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u> Sound	<u>Year 5</u> Earth and Space	<u>Year 6</u> Evolution and Inheritance
EYFS – Natural World Year 1 – Seasonal Changes Year 4 – Sound Year 5 – Earth and Space Year 6 – Evolution and Inheritance	<ul style="list-style-type: none"> •Discuss how we care for the natural world around us. •Comments on the weather, culture, clothing, housing. •Comments on the changes in the leaves, weather, seasons. •Comments on the changes as we enter Summer. •Know how to note and record the weather. 	Know changes across the 4 seasons Know ways to observe and describe the weather associated with the seasons and how day length varies.			Know how sounds are made, associating some of them with something vibrating. Know that vibrations from sounds travel through a medium to the ear. Know that there are patterns between the pitch of a sound and features of the object that produced it. Know that there are patterns between the volume of a sound and the strength of the vibrations that produced it. Know that sounds get fainter as the distance from the sound source increases.	Know and explain that the movement of the Earth, and other planets is relative to the Sun in the solar system. Know that the movement of the Moon is relative to the Earth. Know that the Sun, Earth and Moon are approximately spherical bodies Know and explain how the Earth's rotation works to explain day and night, and the apparent movement of the sun across the sky.	Know that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Know that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. Know and explain how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

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	•Know how to use senses to interact with the outdoors to give children freedom to touch, smell and hear the natural world.						
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Lovers' Lane Primary School – Key Science Concept Words

Science	
anomaly causal classification comparative conclusion explanation evidence fair test hypothesis identification interpretation irreversible matter method	observation precision prediction properties support / refute systematic quantative reversible variable

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