

**Great Hollands Primary  
School**

**Science  
Curriculum**



# Science Curriculum

At Great Hollands Primary School, we believe that science education provides the opportunity for pupils to understand the world around them and we encourage our pupils to be curious about natural phenomena. To help support this, where possible, science links to our wider topics. This approach allows children to explore science in a wider context and provides extended learning opportunities. This starts in EYFS where the children explore their natural environment through seasonal changes and some key physical processes.

Progress in science is important to us and we focus on developing key scientific skills with our children so they are well prepared for the expectations in the next key stage. Scientific enquiry skills include: asking questions, making predictions, setting up experiments, observing and measuring, recording data, interpreting results and evaluating. Pupils are encouraged to use scientific vocabulary with teachers planning in explicit opportunities to develop these skills in each unit of work.

Whilst at GHPS, children will learn about plants, animals including humans, materials, seasonal change, habitats, rocks, light, forces, states of matter, sound, electricity, earth and space and evolution and inheritance. Where appropriate, visits by specialists, alongside close links with local secondary schools, will enhance the delivery of our science curriculum.

## GHPS Science Content Overview

Term		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS 1 Nursery	Topics	<i>What makes me ... me?</i>	<i>How can I stay safe and healthy?</i>	<i>What makes a home and school?</i>	<i>Are things the same everywhere?</i>	<i>How do things grow and change?</i>	<i>How can I take care of my world?</i>
	Science (UW) Focus	<b>Exploring with my senses</b> Using my senses to explore natural materials	<b>Keeping Healthy</b> My body parts and healthy eating	<b>Materials and how things work</b> Exploring what happens to materials & making toys work	<b>Forces and changes in Materials</b> What happens to things in water, wind and on slopes	<b>Life cycles</b> Life cycle on a plant and caterpillar & caring for living things	<b>Caring for the natural World</b> Caring for living things in my world & natural environment
	DM	<b>A B C D E F G H I</b>	<b>A B C D E F G H I</b>	<b>A B C D E F G H I</b>	<b>A B C D E F G H I</b>	<b>A B C D E F G H I</b>	<b>A B C D E F G H I</b>
		Explore the texture and feel of materials. Talk about what they can see, developing vocabulary. Explore what they hear, distinguishing sounds. Explore sense of smell developing vocabulary. Explore their sense of taste, developing vocabulary and knowledge about dangers. Explore and collect materials from the natural environment. Use senses to explore natural materials including different leaves.	Learn to name some body parts and what they do. Learn ways we keep our body healthy including the food we eat and hygiene. Explore a range of healthy foods using all senses and talk about what they can see, feel, smell and taste. Explore what happens to food after time. Explore what happens to materials when mixed together to make gingerbread and talk about what they see.	Explore our school through a senses walk. Explore collections of materials for building. Explore collections of natural materials including stones and shells. Explore strength of materials by snapping. Explore what happens to materials when light is shone through them. Explore what happens to materials when water is put on them. Explore how mechanical things work. Talk about what they see using vocabulary.	Explore materials that float and sink. Explore what happens when pushing things that float into water (force). Explore wind powered things like toy windmills. Explore magnetic forces with magnets and different materials. Explore slopes with water, and a range of different items. Talk about what they see using vocabulary.	Learn and understand the key features of the life cycle of a butterfly. Learn and understand the key features of the life cycle of a frog. Learn and understand the key features of the life cycle of a plant. Explore collections of different seeds. Plant seeds and care for growing plants. Talk about what they see using vocabulary. Notice changes and growth in themselves since being a baby.	Care for the plants they are growing and explore what they need to stay healthy. Talk about what they see using vocabulary. Explore how to care for all living things including humans. Explore, through photographs, why we need to take care of our world and living things in it, including our oceans – explore litter, recycling and respecting the natural environment.
	<b>DM</b>  Understanding the World  The Natural World	<b>Development Matters</b> <ul style="list-style-type: none"> <li>A. Use all their senses in hands-on exploration of natural materials.</li> <li>B. Explore collections of materials with similar and/or different properties.</li> <li>C. Talk about what they see, using a wide vocabulary.</li> <li>D. Explore how things work.</li> <li>E. Plant seeds and care for growing plants.</li> <li>F. Understand the key features of the life cycle of a plant and an animal.</li> <li>G. Begin to understand the need to respect and care for the natural environment and all living things.</li> <li>H. Explore and talk about different forces they can feel.</li> <li>I. Talk about the differences between materials and changes they notice.</li> </ul>					

EYFS 2 Reception	<b>Topics</b>	<i>What will my first Autumn at school be like?</i>	<i>Why are people, places, times and things special?</i>	<i>What changes in Winter and is it the same everywhere?</i>	<i>Who helps us to stay safe, healthy and well</i>	<i>How is life in the UK different to other places around the world?</i>	<i>Have things always been the same?</i>
	<b>Science Focus</b>	<b>The Natural world in Autumn</b> Using my senses to explore my natural school environment	<b>Light, colour and sounds</b> Exploring light, dark, colours sounds linked to Bonfire Night	<b>The Natural world in Winter</b> Explore seasonal changes and contrasting environments	<b>Keeping fit and Healthy</b> Exploring my body parts and keeping it healthy	<b>The Natural world in Spring</b> Explore seasonal changes in my natural environment	<b>The Natural world in Summer</b> Explore seasonal changes in my natural environment
	<b>ELG &amp; DM</b>	<b>1 2 3 A B C D</b>	<b>1 2 3 A B C D</b>	<b>1 2 3 A B C D</b>	<b>1 2 3 A B C D</b>	<b>1 2 3 A B C D</b>	<b>1 2 3 A B C D</b>
		Make observations about their natural environment Draw pictures of plants and animals Describe what they see, hear, feel outside in Autumn (Link to senses from FS1) Explore texture of natural materials Explore seasonal aspect Harvest seeds they planted in Nursery and explore where food comes from Revise life cycles and plant Spring Bulbs (Link with life cycles from FS1)	Explore light and dark – day and night Explore mixing colours and include the rainbow Explore different sounds – loud and quiet linked to fireworks Explore moving parts on toys and magnets including push and pull (Build on forces from FS1) Explore what materials things are made of link to toys (Build on different materials FS1)	Explore their natural environment in Winter Draw pictures of plants and animals Describe what they see, hear, feel outside in Winter (Link to senses from FS1) Recognise seasonal changes linked to weather, plants and animals Explore water/ice – freezing and melting Learn about different environments exploring hot and cold/wet and dry – polar, desert, jungle, ocean, moon	Learn to name parts of the body including wrist, ankle, elbow, chest, waist, hip, thigh, nostril shoulder and what they do to help us Explore how our bodies grow and change over time (link to growth in FS1) Explore good habits to stay safe, fit and healthy including healthy eating Learn about the importance of hygiene including oral hygiene Explore rolling vehicles and shapes on flat and sloped surfaces Revise life cycles by reviewing bulbs	Explore their natural environment in Spring Draw pictures of plants and animals Describe what they see, hear, feel outside in Spring (Link to senses from FS1) Recognise seasonal changes linked to weather, plants and animals inc. growth (Link to life cycles in FS1) Explore wet and dry on materials and link to environments around the world. Explore material strength (Build on different materials FS1)	Explore their natural environment in Summer Draw pictures of plants and animals Describe what they see, hear, feel outside in Summer (Link to senses from FS1) Recognise seasonal changes linked to weather, plants and animals Explore shadows on the ground and how they change Explore materials that float and sink (Link to materials properties FS1)
	<b>ELG</b>  <b>The Natural World</b>	<ol style="list-style-type: none"> <li>Explore the natural world around them, making observations and drawing pictures of animals and plants.</li> <li>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.</li> <li>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</li> </ol>				<b>Development Matters</b> <ol style="list-style-type: none"> <li>Explore the natural world around them.</li> <li>Describe what they see, hear and feel whilst outside.</li> <li>Recognise some environments that are different to the one in which they live.</li> <li>Understand the effect of changing seasons on the natural world around them.</li> </ol>	

Year 1	Topics	<i>What makes me special?</i>	<i>How are the toys we play with made?</i>	<i>Why was a castle built here? Windsor Castle</i>	<i>What makes me proud of our place?</i>	<i>Who lives in the Animal Kingdom?</i>	<i>How did families have fun in the past?</i>
	Science Focus	<b>Photo diary - mapping Year 1 seasonal changes linked to weather and our tree (link in clothing)</b>					
		<b>Humans</b> My body parts and my senses	<b>Everyday Materials</b> What things are made from and properties of materials		<b>Plants</b> Naming and describing basic structures	<b>Animals</b> Identify and name types and compare structures	<b>Seasonal changes</b> Review mapped changes in weather & seasonal in tree
	Skills	<b>1 2 3 4 5 6 7</b>	<b>1 2 3 4 5 6 7</b>	<b>1 2 3 4 5 6 7</b>	<b>1 2 3 4 5 6 7</b>	<b>1 2 3 4 5 6 7</b>	<b>1 2 3 4 5 6 7</b>
	Year 1 Programme of Study	Identify, name, draw and label the basic parts of the human body and say which part is associated with each sense. Observe and describe weather associated with the seasons and how day length varies (Autumn).	Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock. Describe the simple physical properties of a variety of everyday materials. Compare & group together a variety of everyday materials on the basis of their simple physical properties.	Observe and describe weather associated with the seasons and how day length varies (Winter).	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants. Observe and describe weather associated with the seasons and how day length varies (Spring).	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of animals that are carnivores, herbivores and omnivores. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets).	Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies (Summer).
	KS1 Working Scientifically	<p>Pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ol style="list-style-type: none"> <li>1. Asking simple questions and recognising that they can be answered in different ways.</li> <li>2. Observing closely, using simple equipment.</li> <li>3. Performing simple tests.</li> <li>4. Identifying and classifying.</li> <li>5. Using their observations and ideas to suggest answers to questions.</li> <li>6. Gathering and recording data to help in answering questions.</li> </ol> <p><i>Pupils should also use: simple scientific language, secondary sources (books, photographs, videos), grouping and classifying, simple comparative tests and notice patterns.</i></p>					

Year 2	Topics	What happened in the Great Fire?	How can we make a healthy lunchbox?	What is the best way for Mrs Armitage to travel?	What makes us like other animals?	What do plants need to grow?	How would my life be different if I lived in the Amazon?
	Science Focus	Tracking weather changes over time at school – Keep a class weather diary including temperature					
			<b>Animals inc. Humans</b> Needs for survival, health and offspring	<b>Everyday Materials</b> Suitability of materials and changing shapes	<b>Living things &amp; Habitats</b> Identify and how suited inc. simple food chains	<b>Plants</b> Observe growth and the things they need for growth and health	
	Skills	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
	Year 2 Programme of Study	Ongoing weather tracking – Observe, describe and record weather.	Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene. Find out about and describe the basic needs of animals including humans for survival (water, food, air). Ongoing weather tracking – Observe, describe and record weather.	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. Ongoing weather tracking – Observe, describe and record weather.	Notice that animals, inc. humans, have offspring which grow into humans. Explore and compare the differences between things that are living, dead & things that have never been alive. 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. Identify and name a variety of plants and animals in their habitats, including microhabitats. 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.	Observe and describe how seeds and bulbs grow into mature plants. Find and describe how plants need water, light and a suitable temperature to grow and stay healthy. Ongoing weather tracking – Observe, describe and record weather.	Review ongoing weather tracking, noticing patterns (compare to Amazon).
KS1 Working Scientifically		<p>Pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ol style="list-style-type: none"> <li>1. Asking simple questions and recognising that they can be answered in different ways.</li> <li>2. Observing closely, using simple equipment.</li> <li>3. Performing simple tests.</li> <li>4. Identifying and classifying.</li> <li>5. Using their observations and ideas to suggest answers to questions.</li> <li>6. Gathering and recording data to help in answering questions.</li> </ol> <p><i>Pupils should also use: simple scientific language, secondary sources (books, photographs, videos), grouping and classifying, simple comparative tests and notice patterns.</i></p>					

Year 3	<b>Topics</b>	<i>How did Britain change from the Stone Age to the Iron Age?</i>	<i>What is Britain and the UK like now?</i>	<i>Who were the greatest builders?</i>	<i>What do plants need to stay healthy?</i>	<i>How is a region of Mexico &amp; the UK the same/ different?</i>	<i>What forces move (make) mountains?</i>
	<b>Science Focus</b>	<b>Rocks</b> Appearance and properties of rocks, fossils and soils	<b>Animals inc. Humans</b> Function of skeletons and muscles	<b>Light</b> The sun, how we see light, how shadows are formed and changed	<b>Plants</b> Function of parts including life cycles & requirements for growth	<b>*Living things and their Habitats</b> Grouping, classifying and changes to environments	<b>Forces and Magnets</b> Comparing how things move on different surfaces & basics of magnetic forces & magnetism
	<b>Skills</b>	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
	<b>Year 3 Programme of Study</b>	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Recognise that soils are made from rocks and organic matter.	Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	Recognise that they need light in order to see things and that dark is the absence of light. Notice that light is reflected from surfaces. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. Recognise that shadows are formed when the light from a light source is blocked by an opaque object. Find patterns in the way that the size of shadows change.	Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. 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. Investigate the way in which water is transported within plants. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. Recognise that environments can change and that this can sometimes pose dangers to living things in the local area and Guatemala.	Compare how things move on different surfaces notice that some forces need contact between 2 objects, but magnetic forces can act at a distance. Observe how magnets attract or repel each other and attract some materials and not others. 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. Describe magnets as having two poles. Predict whether two magnets will attract or repel each other, depending on which poles are facing.
	<b>LKS2 Working Scientifically</b>	<p>Pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ol style="list-style-type: none"> <li>1. Asking relevant questions and using different types of scientific enquiries to answer them.</li> <li>2. Setting up simple practical enquiries, comparative and fair tests.</li> <li>3. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</li> <li>4. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.</li> <li>5. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</li> <li>6. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>7. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</li> <li>8. Identifying differences, similarities or changes related to simple scientific ideas and processes.</li> <li>9. Using straight forward scientific evidence to answer questions or to support their findings.</li> </ol> <p><i>Pupils should also: read &amp; spell scientific vocabulary, use secondary sources (books, photographs, videos), group and classify, observe changes over time &amp; notice patterns.</i></p>					

Year 4	<b>Topics</b>	<i>What legacies did the Ancient Greeks leave on modern culture?</i>	<i>How was William Shakespeare influenced by the Ancient Greeks?</i>	<i>What did the Romans leave behind?</i>	<i>What makes Italy roar?</i>	<i>How did the loss of the cacao bean contribute to the collapse of the Mayan Empire?</i>	<i>How does chocolate move through our digestive system?</i>
	<b>Science Focus</b>	<b>Sound</b> How sound is made, travels and is changed	<b>Electricity</b> Appliances, circuits, switches, conductors and insulators	<b>Animals and Habitats</b> Explore types of living things, food chains and changes to environments		<b>States of Matter</b> Solids, liquids and gases, changes in state including the water cycle	<b>Animals inc. Humans</b> The digestive system, the function of teeth and *nutrition
	<b>Skills</b>	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
	<b>Year 4 Programme of Study</b>	Identify how sounds are made, associating some of them with something vibrating. Recognise that vibrations from sounds travel through a medium to the ear. Find patterns between the pitch of a sound and features of the object that produced it. Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the sound source increases.	Identify common appliances that run on electricity. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. 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. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals with being good conductors.	Construct and interpret a variety of food chains, identifying producers, predators and prey. Recognise that environments can change and that this can sometimes pose dangers to living things in Italy and the wider world.		Compare and group materials together, according to whether they are solids, liquids or gases. To know the identifiable features of solids, liquids and gases. 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). Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	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. Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions.
	<b>LKS2 Working Scientifically</b>	Pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: <ol style="list-style-type: none"> <li>Asking relevant questions and using different types of scientific enquiries to answer them.</li> <li>Setting up simple practical enquiries, comparative and fair tests.</li> <li>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</li> <li>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.</li> <li>Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</li> <li>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</li> <li>Identifying differences, similarities or changes related to simple scientific ideas and processes.</li> <li>Using straight forward scientific evidence to answer questions or to support their findings.</li> </ol> <p><i>Pupils should also: read &amp; spell scientific vocabulary, use secondary sources (books, photographs, videos), group and classify, observe changes over time &amp; notice patterns.</i></p>					



Year 5	Topics	Why did people invade and settle in Britain?	Where did they settle and why?	How did the Kingdom of England come to be?		Where in the World?	What is the power of The River Thames?
	Science Focus	<b>Living things and their Habitats</b> Life cycles and reproduction	<b>Properties and changes of Materials</b> Properties of everyday materials and fair testing	<b>Properties and changes of Materials</b> Dissolving, separating and irreversible changes	<b>* Electricity</b> Changing brightness and loudness and using symbols for circuits	<b>Forces</b> Gravity, resistance, friction, levers, pulleys and gears	<b>Animals inc. Humans</b> Aging
	Skills	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
	Year 5 Programme of Study	Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals.	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. To understand the basic structure of solids, liquids and gases. Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.	Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution. Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Demonstrate that dissolving, mixing and changes of state are reversible changes. 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 & the action of acid on bicarbonate of soda.	Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. 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. Use recognised symbols when representing a simple circuit in a diagram.	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Identify the effects of air resistance, water resistance and friction, that act between moving surfaces. Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.	Describe the changes as humans develop to old age.
	UKS2 Working Scientifically	Pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: <ol style="list-style-type: none"> <li>1. Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</li> <li>2. Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</li> <li>3. Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</li> <li>4. Using test results to make predictions to set up further comparative and fair tests.</li> <li>5. Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</li> <li>6. Identifying scientific evidence that has been used to support or refute ideas or arguments.</li> </ol> <p><i>Pupils should also: use, say, read &amp; spell scientific vocabulary correctly, use wide range of secondary sources, group and classify, observe changes over different periods of time &amp; notice patterns. Ask own questions and analyse functions, relationships and interactions more systematically. Recognise scientific ideas change &amp; evolve over time.</i></p>					

Year 6	Topics	What is out of this World?	How do living things, including us, stay healthy?	What was the significance of the Battle of Britain?	Why do some creatures no longer exist?	How successful are we as entrepreneurs?
	Science Focus	<b>*Earth and Space</b> Movement of the earth and other planets around the sun including the earth's rotation	<b>Animals inc. Humans</b> Circulatory system, nutrition and healthy living	<b>Light</b> How light travel, how we see and the impact on shadows	<b>Living Things, Habitats, Evolution &amp; Inheritance</b> Living things can be classified, they adapt and evolve	
	Skills	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
	Year 6 Programme of Study	Describe the movement of the Earth and other planets relative to the sun in the solar system. Describe the movement of the moon relative to the Earth. Describe the sun, Earth and moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.	Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. Describe the ways in which nutrients and water are transported within animals, including humans.	Recognise that light appears to travel in straight lines. 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. 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. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	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. Give reasons for classifying plants and animals based on specific characteristics. Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents (inherited and acquired characteristics). Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	
	UKS2 Working Scientifically	Pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: <ol style="list-style-type: none"> <li>1. Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</li> <li>2. Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</li> <li>3. Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</li> <li>4. Using test results to make predictions to set up further comparative and fair tests.</li> <li>5. Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</li> <li>6. Identifying scientific evidence that has been used to support or refute ideas or arguments.</li> </ol> <p><i>Pupils should also: use, say, read &amp; spell scientific vocabulary correctly, use wide range of secondary sources, group and classify, observe changes over different periods of time &amp; notice patterns. Ask own questions and analyse functions, relationships and interactions more systematically. Recognise scientific ideas change &amp; evolve over time.</i></p>				

Most POS are in NC year groups. All are within phases and marked with \* when taught in a different year group.