# Science Long Term Planning

### Curriculum drivers

	Year 1 / 2 – Year A					
	Toy Story	The Great Fire of London	Pets at Home	People who help us	Treasure	Amazing Australia!
Science	Everyday Materials (Yr1) Uses of materials (Y2) <mark>Plus Science Skills</mark>		Animals including humans (Yr1) (Classification) Plus Science Skills	Animals including humans (Y2) (Health) Plus Science Skills	Living things and their habitat Plus Science Skills	s (yr2)
	<ul> <li>which it is made</li> <li>identify and name a varincluding wood, plastic,</li> <li>describe the simple phyof everyday materials</li> <li>compare and group tog materials on the basis of properties</li> <li>Pupils should be taught to: <ul> <li>identify and compare the everyday materials, incoglass, brick, rock, paper uses</li> <li>find out how the shape some materials can be bending, twisting and some semicircular semicircu</li></ul></li></ul>	he suitability of a variety of luding wood, metal, plastic, and cardboard for particular s of solid objects made from changed by squashing, tretching t and the material from which f everyday materials, metal, water and rock.	<ul> <li>Pupils should be taught to: <ul> <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> </li> <li>Identify and name a variety of common animals that are carnivores.</li> </ul>	<ul> <li>Pupils should be taught to: <ul> <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> </li> <li>Identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates.</li> <li>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li> </ul>	<ul> <li>things that are living, denotes the provided of the provided of the provided of the provide of the provided of the provided</li></ul>	bbtain their food from plants og the idea of a simple food name different sources of erences between things that hat have never been alive. Is live in habitats to which ow different habitats different kinds of animals end on each other. I plants and animals in their tats. their food from plants and of a simple food chain, and

Compare and group together a variety of everyday materials on the basis of their simple physical properties. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard for particular uses. • 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	<ul> <li>birds, fish, amphibians, reptiles, mammals and invertebrates.</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 (birds, fish, amphibians, reptiles, mammals and invertebrates, 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> <li>Notice that animals, including humans, have offspring which grow into adults.</li> <li>Investigate 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>asking simple questions and recognising that they can be answered in different ways</li> </ul>	structure of a variety of common animals (birds, fish, amphibians, reptiles, mammals and invertebrates,	<ul> <li>asking simple questions and recognising that they can be answered in different ways</li> <li>observing closely, using simple equipment</li> <li>performing simple tests</li> <li>identifying and classifying</li> <li>using their observations and ideas to suggest answers to questions</li> <li>gathering and recording data to help in answering questions</li> </ul>
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	<ul> <li>identifying and classifying</li> </ul>	
	<ul> <li>using their observations and ideas to suggest answers to questions</li> </ul>	

The curriculum is underpinned by the school's Curriculum Drivers: Knowledge, Skills, Community and Self. The spiritual, moral, social and cultural development of our pupils and their understanding of the core values of our society are woven through the curriculum.

Year 1 / 2 – Year B

	Ghastly events	Extreme Weather	Royal Party Time!	How does your garden grow?	Amazing Africa! Kenya	Sailing across the sea
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Science	Seasonal changes (Y1) Living things and their habitats (yr2) Polar region Plus Science Skills	Seasonal changes (Y1) Plants (Yr1) Living things and their habitats (yr2) Local contexts Forest school Plus Science Skills	Seasonal changes (Y1) Plants (Yr2) Living things and their habitats (yr2) African contexts Plus Science Skills
	<ul> <li>Pupils should be taught to: <ul> <li>observe changes across the 4 seasons</li> <li>observe and describe weather associated with the seasons and how day length varies</li> </ul> </li> <li>Pupils should be taught to: <ul> <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> </ul> </li> <li>Explore and compare the differences between things that are living, that are dead and 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 habitats provide for the basic needs of different habitats provide for the basic needs of different 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 micro-habitats. 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 the apparent movement of the Sun during the day. Observe changes across the four seasons.</li> </ul>	<ul> <li>Pupils should be taught to: <ul> <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> </li> <li>Pupils should be taught to: <ul> <li>observe changes across the 4 seasons</li> <li>observe and describe weather associated with the seasons and how day length varies</li> </ul> </li> <li>Pupils should be taught to: <ul> <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 habitats to which they are suited and that have never been alive. Identify that most living things live in habitats provide for the basit to which they are suited and that have never been alive. Identify and name a variety of plants and animals and plants and other animals, using the idea of a simple food chain, and identify and name different sources of food</li> </ul> </li> </ul>	<ul> <li>Pupils should be taught to: <ul> <li>observe changes across the 4 seasons</li> <li>observe and describe weather associated with the seasons and how day length varies</li> </ul> </li> <li>Pupils should be taught to: <ul> <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> </li> <li>Pupils should be taught to: <ul> <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 habitats to which they are solve of food</li> </ul> </li> </ul>

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	<ul> <li>Observe and describe weather associated with the seasons and how day length varies.</li> <li>asking simple questions and recognising that they can be answered in different ways</li> <li>observing closely, using simple equipment</li> <li>performing simple tests</li> <li>identifying and classifying</li> <li>using their observations and ideas to suggest answers to questions</li> <li>gathering and recording data to help in answering questions</li> </ul>	<ul> <li>be answered in different ways</li> <li>observing closely, using simple equipment</li> <li>performing simple tests</li> <li>identifying and classifying</li> </ul>	<ul> <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>Identify and name a variety of common plants, including garden plants, wild plants and trees and those classified as deciduous and evergreen.</li> <li>Identify and describe the basic structure of a variety of common flowering plants, including roots, stem/trunk, leaves and flowers.</li> <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>Observe the apparent movement of the Sun during the day.</li> <li>Observe and describe weather associated with the seasons and how day length varies.</li> <li>asking simple questions and recognising that they can be answered in different ways</li> <li>observing closely, using simple equipment</li> <li>performing simple tests</li> <li>identifying and classifying</li> <li>using their observations and ideas to suggest answers</li> </ul>
		<ul> <li>using their observations and ideas to suggest answers to questions</li> </ul>	<ul> <li>using their observations and ideas to suggest answers to questions</li> </ul>
		<ul> <li>gathering and recording data to help in answering questions</li> </ul>	<ul> <li>gathering and recording data to help in answering questions</li> </ul>

			Year 3 / 4 – Ye	ear A		
	Bonjour! Europe - Focus on France	Remarkable Romans	La La La!	Food Glorious Food	Anglo-Saxons and Scots	What's beneath my feet? Rocks and Fossils
Science	Forces and magnets y3 Plus Science Skills		Sound Y4 Plus Science Skills	Animals including Humans nutrition (YR3) Skeletons Plus Science Skills	Living things and their habitats Y4 Plus Science Skills	Rocks (YR3) Plus Science Skills
	<ul> <li>notice that some for objects, but magnetic</li> <li>observe how magnetic and attract some materials on the basis attracted to a magnetic materials</li> <li>describe magnets as</li> <li>predict whether 2 materials</li> <li>describe magnets as</li> <li>predict whether 2 materials move or Notice that some forces need objects and some forces act attract some materials and materials on the basis of whe magnet and identify some materials other, depending on which particle whether two magnets as having the materials on the basis of whe magnet and identify some materials other, depending on which particle whether two magnets as having the materials other asking relevant questions scientific enquiries to any scientific enquiries to any scientific enduities to any scientif</li></ul>	having 2 poles agnets will attract or repel ag on which poles are facing of different surfaces. contact between two t a distance. or repel each other and ot others. a variety of everyday ther they are attracted to a agnetic materials. wo poles. s will attract or repel each oles are facing. and using different types of	<ul> <li>Pupils should be taught to: <ul> <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> </li> </ul>	<ul> <li>Pupils should be taught to: <ul> <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> </li> <li>Identify that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they cannot make their own food and they get nutrition from what they eat.</li> <li>Construct and interpret a variety of food chains, identify that humans and some sidentify that humans and some animals have</li> </ul>	<ul> <li>Pupils should be taught to: <ul> <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> </ul> </li> <li>Explore and use classification keys.</li> <li>Recognise that environments can be grouped in a variety of ways.</li> <li>Recognise that environments can sometimes pose dangers to living things can be grouped in a variety of ways.</li> <li>Recognise that environments can sometimes pose dangers to specific habitats.</li> <li>asking relevant questions and using different types of scientific enquiries to answer them</li> </ul>	Pupils should be taught to: • 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 Rocks and Soils - Compare and group together different kinds of rocks on the basis of their simple, physical properties. Rocks and Soils - Relate the simple physical properties of some rocks to their formation (igneous or sedimentary). Rocks and Soils - Recognise that soils are made from rocks and organic matter.

<ul> <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>Recognise that vibrations from sounds travel throug a medium to the ear.</li> <li>asking relevant</li> </ul>	<ul> <li>skeletons and muscles for support, protection and movement.</li> <li>Describe the simple</li> <li>setting up simple practical</li> <li>enquiries, comparative and fair tests</li> <li>making systematic and</li> </ul>	asking relevant questions and using
<ul> <li>asking retevant questions and using 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 straightforward scientific evidence to answer questions or to support their findings.</li> <li>gathering, recording, classifying and presenting data in a variety of ways to help in answering questing.</li> <li>gathering, recording, classifying and presenting data in a variety of ways to help in answering questing.</li> <li>recording findings usin simple scientific</li> <li>gathering recording, classifying and presenting data in a variety of ways to help in answering questions.</li> <li>recording findings usin simple scientific</li> </ul>	<ul> <li>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>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, lebelled diagrams, keys, bar charts, and tables</li> <li>resporting 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</li> </ul>	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 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

	ons, from enquiries, scient s for including oral and answe	<ul> <li>straightforward htific evidence to ver questions or to ort their findings.</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes</li> <li>using straightforward scientific evidence to answer questions or to support their findings.</li> </ul>
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The curriculum is underpinned by the school's Curriculum Drivers: Knowledge, Skills, Community and Self. The spiritual, moral, social and cultural development of our pupils and their understanding of the core values of our society are woven through the curriculum.

Year 3 / 4 – Year B Stone Age -Iron age **Extreme Survival!** Journey to Ancient Egypt United Kingdom Europe - Russia - focus on **River Volga?** Science **Electricity Y4** States of matter (YR4) Light Y3 Plants Y3 Animals, including humans Y4 (Crumble -light painting) **Plus Science Skills Plus Science Skills** Plus Science Skills Plus Science Skills Plus Science Skills Pupils should be taught to: identify and describe describe the simple functions of the basic parts of identify common compare and group recognise that they appliances that run materials together, need light in order the functions of the digestive system in humans on electricity according to to see things and different parts of identify the different types of teeth in humans and ٠ whether they are that dark is the flowering plants: • construct a simple their simple functions series electrical solids, liquids or absence of light roots, stem/trunk, construct and interpret a variety of food chains, leaves and flowers circuit, identifying gases notice that light is identifying producers, predators and prey and naming its basic • observe that some reflected from explore the Identify that animals, including humans, need the right • parts, including cells, materials change surfaces requirements of types and amounts of nutrition, that they cannot make wires, bulbs, switches state when they are • recognise that light plants for life and their own food and they get nutrition from what they eat. and buzzers heated or cooled, from the sun can be growth (air, light, Construct and interpret a variety of food chains, identifying identify whether or and measure or water, nutrients from producers, predators and prey. dangerous and that research the soil, and room to Identify that humans and some animals have skeletons and not a lamp will light there are ways to in a simple series temperature at protect their eyes grow) and how they muscles for support, protection and movement. circuit, based on which this happens recognise that vary from plant to Describe the simple functions of the basic parts of the • in degrees Celsius plant whether or not the shadows are formed digestive system in humans. lamp is part of a (°C) when the light from ٠ investigate the way in Identify the different types of teeth in humans and their complete loop with a identify the part which water is simple functions. • a light source is battery played by blocked by an transported within • asking relevant questions and using different types of recognise that a scientific enquiries to answer them • evaporation and opaque object plants switch opens and condensation in the find patterns in the explore the part that • • setting up simple practical enquiries, comparative and closes a circuit and water cycle and flowers play in the life way that the size of fair tests associate this with associate the rate of cycle of flowering shadows change making systematic and careful observations and, where Notice that light is whether or not a evaporation with plants, including appropriate, taking accurate measurements using lamp lights in a temperature reflected from surfaces. pollination, seed standard units, using a range of equipment, including States of Matter - Compare simple series circuit formation and seed Recognise that shadows thermometers and data loggers and group materials dispersal recognise some are formed when the light common conductors together, according to from a light source is Identify and describe the gathering, recording, classifying and presenting data in whether they are solids, functions of different parts and insulators, and blocked by a solid object. a variety of ways to help in answering questions liquids or gases. associate metals with

<ul> <li>being good conductors</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> <li>Identify common appliances that run on electricity.</li> <li>Construct a simple series circuit identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.</li> <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</li> </ul>	that some materialsrchange state when theytare heated or cooled, andameasure the temperatureFat which this happens intdegrees Celsius (°C),abuilding on the teaching inFmathematics.FStates of Matter - Identifyt	<ul> <li>Recognise that light is needed in order to see things and that dark is the absence of light.</li> <li>Recognise that light from the sun can be dangerous and that there are ways to protect the eyes.</li> <li>Find patterns in the way that the size of shadows change.</li> <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,</li> </ul>	<ul> <li>of flowering plants: roots, stem, 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 role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li> <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> </ul>	<ul> <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 straightforward scientific evidence to answer questions or to support their findings.</li> </ul>

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answer questions or to		
support their findings.		

	Year 5 / 6 – Year A					
	Aspect or theme beyond 1066 - ch Vi	Royalty anging powers of monarchs (Henry II) a - Victorians?	Around the world in 80 days	Victorious Vikings Viking and Anglo Saxon	Shaking and exploding Earthquake, zones and volcanoes	Local study - Gillingham /SP How we are linked
Science	Electricity Y6 Plus Science Skills	<mark>Forces Y5</mark> Plus Science Skills	Animals including humans Y6 Plus Science Skills		Evolution Y6 - Charles Darwin? Plus Science Skills	Y5 Living things and their habitats Year 6 'Talk' Animals including humans Plus Science Skills
	<ul> <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> <li>Use recognised symbols when representing a simple circuit in a diagram.</li> </ul>	<ul> <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> <li>Forces - Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the</li> </ul>	<ul> <li>circulatory system, ar the heart, blood vessioner recognise the impact lifestyle on the way the describe the ways in the are transported within humans</li> <li>Identify and name the main provide the changes and blood Describe the changes as hum old age.</li> <li>Recognise the importance of lifestyle on the way the human Describe ways in which nutring transported within animals, i</li> <li>planning different types of answer questions, includin controlling variables whe</li> <li>taking measurements, us</li> </ul>	of diet, exercise, drugs and heir bodies function which nutrients and water n animals, including harts of the human in the functions of the d. ans develop from birth to diet, exercise, drugs and an body functions. ents and water are including humans. of scientific enquiries to ng recognising and re necessary ing a range of scientific ng accuracy and precision,	<ul> <li>Pupils should be taught to:</li> <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</li> </ul>	<ul> <li>Pupils should be taught to:</li> <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>Pupils should be taught to:</li> <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</li> </ul>

	Compare and give reasons for	resistance, water resistance and	recording data and results of increasing complexity	Recognise that living	their bodies
ľ	variations in how components	friction that acts between	using scientific diagrams and labels, classification	things produce offspring	function
1	unction, including the	moving surfaces.	keys, tables, scatter graphs, bar and line graphs	of the same kind, but	<ul> <li>describe the ways</li> </ul>
	prightness of bulbs, the	Forces - Describe, in terms of	using test results to make predictions to set up	normally offspring vary	in which nutrients
	oudness of buzzers and the	drag forces, why moving objects	further comparative and fair tests	and are not identical to	and water are
	on/off position of switches.	that are not driven tend to slow	•	their parents.	transported within
	<ul> <li>planning different types of</li> </ul>	down.	reporting and presenting findings from enquiries,	Recognise that living	animals, including
	scientific enquiries to	Forces - Understand that force	including conclusions, causal relationships and	things have changed over	humans
	answer questions, including	and motion can be transferred	explanations of and a degree of trust in results, in	time and that fossils	Describe the differences in
	recognising and controlling	through mechanical devices	oral and written forms such as displays and other	provide information about	the life cycles of a
	variables where necessary	such as gears, pulleys, levers	presentations	living things that inhabited	, mammal, amphibian, an
		and springs.	identifying scientific evidence that has been used to	the Earth millions of years	insect and a bird.
	<ul> <li>taking measurements, using</li> </ul>	Forces - Understand that some	support or refute ideas or arguments	, ago.	Describe the life process
	a range of scientific	mechanisms, including levers,	support of relate lacas of alguments	Identify how animals and	of reproduction in some
	equipment, with increasing	pulleys and gears, allow a		plants are suited to and	plants and animals.
	accuracy and precision,	smaller force to have a greater		adapt to their	Describe how living things
	taking repeat readings when	effect.		environment in different	are classified into broad
	appropriate	<ul> <li>planning different types of</li> </ul>		ways.	groups according to
	<ul> <li>recording data and results</li> </ul>	scientific enquiries to		<ul> <li>planning different</li> </ul>	common observable
	of increasing complexity	answer questions, including		types of scientific	characteristics.
	using scientific diagrams and	recognising and controlling		enquiries to answer	Give reasons for
	labels, classification keys,	variables where necessary		questions, including	classifying plants and
	tables, scatter graphs, bar			-	animals based on specific
	and line graphs	<ul> <li>taking measurements, using</li> </ul>		recognising and	
		a range of scientific		controlling variables	characteristics.
	<ul> <li>using test results to make</li> </ul>	equipment, with increasing		where necessary	Identify and name the
	predictions to set up further	accuracy and precision,		<ul> <li>taking measurements,</li> </ul>	main parts of the human
	comparative and fair tests	taking repeat readings when		using a range of	circulatory system, and
	<ul> <li>reporting and presenting</li> </ul>	appropriate		scientific equipment,	explain the functions of
	findings from enquiries,	• recording data and results of		with increasing	the heart, blood vessels
	including conclusions, causal	increasing complexity using		accuracy and	and blood.
	relationships and	scientific diagrams and		precision, taking	Describe the changes as
	explanations of and a	labels, classification keys,		repeat readings when	humans develop from
	degree of trust in results, in	tables, scatter graphs, bar		appropriate	birth to old age.
	oral and written forms such				Recognise the importance
	as displays and other	and line graphs		<ul> <li>recording data and results of increasing</li> </ul>	of diet, exercise, drugs
	presentations	<ul> <li>using test results to make</li> </ul>		results of increasing	and lifestyle on the way
	•	predictions to set up further		complexity using	the human body
	<ul> <li>identifying scientific</li> </ul>	comparative and fair tests		scientific diagrams and	functions.
	evidence that has been used	<ul> <li>reporting and presenting</li> </ul>		labels, classification	Describe ways in which
		findings from enquiries,		keys, tables, scatter	nutrients and water are
		intaings nom enquines,			

to support or refute ideas or arguments	<ul> <li>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</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	•	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	<ul> <li>transported within animals, including humans.</li> <li>planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li> <li>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>using test results to make predictions to sat up further</li> </ul>
			arguments	<ul><li>graphs, bar and line</li><li>graphs</li><li>using test results to</li></ul>
				<ul> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and</li> </ul>

		written forms such as displays and other presentations
		<ul> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>

	To infinity and beyond - Science heavy	Aspect or theme beyond 1066 - significant turning point in British History - WWI / WWII Battle of Britain	Vanishing Rainforests -Link to Kenya	Mayans	Ancient Greeks	A local history study - Shaftesbury - Gold Hill/St Peter's Church/The Abbey
Science	Earth and Space Y5 Plus Science Skills	<mark>Light Y6</mark> Plus Science Skills	Properties and changes of ma Plus Science Skills	aterials Y5	Living things and their habitats Y6 Plus Science Skills	Year 6 'Talk' Animals including humans Y5 Plus Science Skills
	<ul> <li>Pupils should be taught to:</li> <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> <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.</li> </ul>	<ul> <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</li> </ul>	<ul> <li>on the basis of their p hardness, solubility, ti (electrical and therma</li> <li>know that some mate form a solution, and d substance from a solu</li> <li>use knowledge of soli decide how mixtures through filtering, sievi</li> <li>give reasons, based of and fair tests, for the materials, including m</li> <li>demonstrate that diss of state are reversible</li> <li>explain that some cha of new materials, and not usually reversible,</li> </ul>	ds, liquids and gases to might be separated, including ing and evaporating n evidence from comparative particular uses of everyday tetals, wood and plastic solving, mixing and changes changes unges result in the formation that this kind of change is , including changes ng and the action of acid on everyday materials based on nd fair tests, including their	<ul> <li>Pupils should be taught to:         <ul> <li>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</li> <li>give reasons for classifying plants and animals based on specific characteristics</li> </ul> </li> <li>Describe the differences in the life cycles of a mammal, amphibian, an insect and a bird.</li> <li>Describe the life process of reproduction in some plants and animals.</li> </ul>	<ul> <li>Pupils should be taught to: <ul> <li>describe the</li> <li>changes as humans</li> <li>develop to old age</li> </ul> </li> <li>Identify and name the</li> <li>main parts of the human</li> <li>circulatory system, and</li> <li>explain the functions of</li> <li>the heart, blood vessels</li> <li>and blood.</li> <li>Describe the changes as</li> <li>humans develop from</li> <li>birth to old age.</li> <li>Recognise the importance</li> <li>of diet, exercise, drugs</li> <li>and lifestyle on the way</li> <li>the human body</li> <li>functions.</li> <li>Describe ways in which</li> <li>nutrients and water are</li> <li>transported within</li> <li>animals, including</li> <li>humans.</li> <li>planning different</li> <li>types of scientific</li> <li>enquiries to answer</li> <li>questions, including</li> <li>recognising and</li> </ul>

				Understand how some materials will dissolve in liquid to	groups according to	controlling variables
				form a solution and describe how to recover a substance	common observable	where necessary
		answer questions,		from a solution.	characteristics.	• taking measurements,
		including recognising and		Use knowledge of solids, liquids and gases to decide how	Give reasons for	using a range of
		0	0	mixtures might be separated, including through filtering,	classifying plants and	scientific equipment,
		1	explain that objects are seen		animals based on specific	with increasing
•	•	taking measurements,	because they give out or	Rocks and Soils - Describe in simple terms how fossils are	characteristics.	accuracy and
		using a range of scientific	reflect light into the eyes.	formed when things that have lived are trapped within	<ul> <li>planning different</li> </ul>	precision, taking
		equipment, with	ose the faca that light	sedimentary rock.	types of scientific	repeat readings when
		increasing accuracy and	-	Give reasons, based on evidence from comparative and	enquiries to answer	appropriate
		precision taking repeat		fair tests, for the particular uses of everyday materials,	questions, including	
		readings when	the same shape as the	including metals, wood and plastic.	recognising and	<ul> <li>recording data and</li> </ul>
		appropriate	-	Demonstrate that dissolving, mixing and changes of state	controlling variables	results of increasing
			•	are reversible changes.	where necessary	complexity using
		recording data and		Explain that some changes result in the formation of new	• taking measurements,	scientific diagrams and
		results of increasing	of the light source changes.	materials, and that this kind of change is not usually	using a range of	labels, classification
		complexity using	Explain that we see things	reversible, including changes associated with burning,	scientific equipment,	keys, tables, scatter
		scientific diagrams and	because light travels from	oxidisation and the action of acid on bicarbonate of soda.	with increasing	graphs, bar and line
		labels, classification keys,	light sources to our eyes or	<ul> <li>planning different types of scientific enquiries to</li> </ul>	accuracy and	graphs
		tables, scatter graphs,	from objects and then to our	answer questions, including recognising and	precision, taking	<ul> <li>using test results to</li> </ul>
		bar and line graphs	eyes.	controlling variables where necessary	repeat readings when	make predictions to
	•	using test results to	• planning different types	<ul> <li>taking measurements, using a range of scientific</li> </ul>	appropriate	set up further
		make predictions to set	of scientific enquiries to	equipment, with increasing accuracy and precision,		comparative and fair
		up further comparative	answer questions,	taking repeat readings when appropriate	<ul> <li>recording data and</li> </ul>	tests
		and fair tests	including recognising		results of increasing	<ul> <li>reporting and</li> </ul>
		reporting and presenting	and controlling variables	<ul> <li>recording data and results of increasing complexity</li> </ul>	complexity using	presenting findings
		findings from enquiries,	where necessary	using scientific diagrams and labels, classification keys,	scientific diagrams and	from enquiries,
		including conclusions,	<ul> <li>taking measurements,</li> </ul>	tables, scatter graphs, bar and line graphs	labels, classification	including conclusions,
		causal relationships and	using a range of	<ul> <li>using test results to make predictions to set up further</li> </ul>	keys, tables, scatter	causal relationships
		explanations of and a	scientific equipment,	comparative and fair tests	graphs, bar and line	and explanations of
		degree of trust in results,	with increasing accuracy		graphs	and a degree of trust
		•	and precision, taking	including conclusions, causal relationships and	<ul> <li>using test results to</li> </ul>	in results, in oral and
		in oral and written forms			make predictions to	written forms such as
		such as displays and	repeat readings when	explanations of and a degree of trust in results, in oral	set up further	
		other presentations	appropriate	and written forms such as displays and other	comparative and fair	displays and other
	•	identifying scientific	<ul> <li>recording data and</li> </ul>	presentations	tests	presentations
		evidence that has been	results of increasing	<ul> <li>identifying scientific evidence that has been used to</li> </ul>		<ul> <li>identifying scientific</li> </ul>
		used to support or refute	complexity using	support or refute ideas or arguments	<ul> <li>reporting and</li> </ul>	evidence that has
		ideas or arguments	scientific diagrams and		presenting findings	been used to support
			labels, classification		from enquiries,	
			keys, tables, scatter		including conclusions,	

<ul> <li>graphs, bar and line graphs</li> <li>using test results to make predictions to set up further comparative and fair tests</li> <li>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</li> </ul>	,	<ul> <li>causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	or refute ideas or arguments
<ul> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>			