# St.Joseph's R.C. Primary School

'Through love and service, with Jesus in our hearts and heads, we can achieve anything.



## Foundation Stage



In the EYFS Science is taught through the Understanding he World: The Natural World strand. It is introduced indirectly through activities that encourage your child to explore, problem solve, observe, predict, think, make decisions and talk about the world around them. During their early learning experiences at school the children will explore creatures, people, plants and objects in their natural environments. They will observe and manipulate objects and materials to identify differences and similarities. Children will learn about similarities and differences in relation to places, objects, materials and living things. They will talk about the features of their own immediate environment and how environments might vary from one another. They will make observations of animals and plants and explain why some things occur, and talk about changes.

### Key Stage One

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 guestions 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, 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.

#### Lower Key Stage Two

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 Two

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. 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.

		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Autumn									
Term	Торіс	What makes me special? Bringing nursery rhymes to life!	Toys - how have toys changed over time?	To Infinity and Beyond - how has space travel changed in living memory?	Let's Rock! - how did people live in the Stone, Bronze and Iron Ages?	Meet the Greeks - why should we thank the Ancient Greeks?	That's Settled - who were the Anglo- Saxons?	Vicious Vikings - why did the Vikings invade Britain and how successful were they?	
	NC Strand	Understanding the world	Seasonal Changes/ Animals Including Humans	Use of Every Day Materials	Rocks	Animals Including Humans	Forces	Evolution and Inheritance	
	Scientific Enquiry skills and Concepts Progression	In this unit, the children will:	Pupils should be taught to:	Pupils should be taught to:	Pupils should be taught to:	Pupils should be taught to:	Pupils should be taught to:	Pupils should be taught to:	
		Children at the expected level of development will: -	- observe changes across the four seasons -observe and describe weather associated with the seasons	- identify and compare the suitability of a variety of everyday materials, including	- compare and group together different kinds of rocks on the basis of their appearance and simple physical	- identify that humans and some other animals have skeletons and muscles for	- explain that unsupported objects fall towards the Earth because of the force of gravity acting	- recognise that living things produce offspring of the same kind, but normally offspring vary and	
		world around them, making observations and drawing pictures of	and how day length varies.	plastic, glass, brick, rock, paper and cardboard for	- describe in simple	and movement.	between the Earth and the falling object	are not identical to their parents	
		animals and plants;	draw and label the basic parts of the	- find out how the	are formed when things that have	interpret a variety of food chains,	- identify the effects of air	animals and plants are adapted to suit	
		Know some	human body and	shapes of solid	lived are trapped	identifying	resistance, water	their environment	
		similarities and	say which part of	objects made from	within rock	producers,	resistance and	in different ways	
		differences	the body is	some materials can		predators and prey.	friction, that act	and that adaptation	
		between the	associated with	be changed by	- recognise that soils		between moving	may lead to	
		natural world	each sense	squashing, bending,	are made from	Pupils might work	surfaces	evolution.	
		around them and	Densite wet elst soonale	twisting and	rocks and organic	scientifically by:		Describe sectorization and	
		contrasting	Pupils might work	stretching.	matter.		- recognise that	<u>Pupils might Work</u>	
		drawing on their	SCIENTINGING DY.	Pupils might work	Pupils might work		including levers	SCIENCIALLY DY.	
		experiences and	-making tables and	scientifically by:	scientifically by:		pullevs and gears	-Observing and	
		what has been read	charts about the				allow a smaller	raising questions	
		in class; -	weather; and	-comparing the	-observing rocks,		force to have a	about local animals	
			making displays of	uses of everyday	including those used		greater effect.	and how they are	
		Understand some	what happens in	materials in and	in buildings and			adapted to their	
		important	the world around	around the school	gravestones, and		Pupils might work	environment;	
		processes and	them, including day	with materials	exploring how and		scientifically by:	comparing how	
		changes in the	length, as the	found in other	why they might			some living things	
		natural world	seasons change.	places (at home,	have changed over		- exploring falling	are adapted to	
		around them,		the journey to	time; using a hand		paper cones or cup-	survive in extreme	
		including the		school, on visits,	to hole them to		cake cases, and	conditions, for	
		sedsons and		and in stories,	identify and classify		making a variaty of	example, cactuses,	
		matter		observing closely	rocks according to		naking a variety Of	penguins and camels	
				identifying and	whether they have		carrying out fair	cumers.	
				classifying the uses	grains or crystals,		tests to determine	- analysing the	

	making observations and	associated with the seasons and how	have never been alive.	and that they	circuit, identifying and naming its	- describe the	used in the circuit
	world around them,	describe weather	and things that	right types and	series electrical	system	voltage of cells
	Explore the natural	-Observe and	that are living, dead	riumans, need the	- construct a simple	the Sun in the solar	number and
		5000015	between things	animais, including	on cicculoty	planets, relative to	of a buzzer with the
	development will	seasons	differences	-identity triat	on electricity	Earth, and other	lamp or the volume
	expected level of	across the four	- Explore and	-identify that	appliances that rup	movement of the	hrightness of a
Progression	Childron at the	Obsorva changes	Explore and		identify common	doscribo tha	associato the
skills and Concepts	children will:	children will:	children will:	children will:	children will:	children will:	children will:
Scientific Enquiry	In this unit, the	In this unit, the	In this unit, the	In this unit, the	In this unit, the	In this unit, the	In this unit, the
NC Strand		Seasonal Changes	Living Things and their Habitats	Animals Including Humans	Electricity	Earth and Space	Electricity
		changed over time?	over		<b>-1</b>	<b>a</b>	
	celebrations?	of Heywood	transport changed	work?			change the world?
	seasons and	- how has our town	there! - how has	does my body			how did electricity
Topic	What are our	A Trip Around Town	Adventure is out	Healthy Me - how	Lighting it up!	Mapping it out!	Gadgets Galore -
				are formed.			
				about the way soils			
				-Forming and			
				in water.			
				or what changes			
				are rubbed together			
				happens when rocks			
				investigate what			
				differences		effects.	
				similarities and		explore their	
				soils and identify		and/or springs and	flowers.
				ovaloring different		that use levers,	brightly coloured
				fossils are formed.		making products	climbing plants,
				and explore how		-designing and	lungs, tendrils on
				sedimentary rock		unterent shupes.	having gills or
				fossils are found in		different shapes	or a short beak
				different kinds of		by making and	feet rather than
				discussing the		resistance in water	as being on two
			observations.	- researching and		- exploring	adaptations, such
			recording their	nave lossils in them.		the most encetive.	specific
			of different	and whether they		which designs are	advantages and
			F 1.FE -				

	drawing pictures of	the day length		cannot make their	basic parts,	movement of the	-compare and give
	animals and plants;	varies	-Identify that most	own food; they get	including cells,	Moon relative to	reasons for
			living things live in	nutrition from what	wires, bulbs,	the Earth	variations in how
	Know some	-Observe closely	habitats to which	they get	switches and		components
	similarities and	using simple	they are suited and	they eat.	buzzers	- describe the Sun,	function, including
	differences	equipment	describe how	descuttes also		Earth and Moon as	the brightness of
	between the		different habitats	- describe the	- identify whether	approximately	bulbs, the loudness
	natural world	Pupils might work	provide the basic	simple functions of	or not a lamp will	spherical bodies	of buzzers and the
	around them and	scientifically by:	needs of different	the basic parts of	light in a simple		on/off position of
	contrasting		kinds of animals	the digestive system	series circuit, based	- use the idea of	switches
	environments.	-Use observations	and plants, and	in humans	on whether or not	the Earth's rotation	
	drawing on their	to suggest answers	how they depend	in nomans	the lamp is part of	to explain day and	-use recognised
	experiences and	to questions	on each other.	Idontify different	a complete loop	night and the	symbols when
	what has been read	Perform simple			with a battery	annarent	representing a
	in class: -	tests	-Identify and name	types of teeth in	with a battery	movement of the	simple circuit in a
			a variety of plants	humans and their	- recognise that a	sun across the sky	diagram
	Understand some	-Gather and record	and animals in their	functions.	switch opens and	Sull del 055 the Sky	alagram.
	important	data to bolp in	habitats including		closes a circuit and	Pupils might work	Pupils might work
	ninportant processes and	answoring simple	micro babitato	Pupils might work	closes a circuit allu	<u>rupiis might work</u>	<u>rupiis might work</u>
	processes and	answering simple	micro- nabilals.	scientifically by:		SCIENTINGING DY.	Scientifically by.
	changes in the	questions	Describe how		lown lights in a	Deparding data	Identifying
			-Describe now		iantip lignes ni a		-identifying
	around them,		animais obtain their	comparing the	simple series circuit	and results of	scientific evidence
	including the		tood from plants	teeth of carnivores		Increasing	that has been used
	seasons and		and other animals,	and herbivores and	- recognise some	complexity using	to support or refute
	changing states of		using the idea of a	suggesting reasons	common	scientific diagrams	ideas or arguments.
	matter.		simple food chain,	for difforences:	conductors and	and labels,	
			and identify and	finding out what	insulators, and	classification keys,	- Planning different
			name different	damages tooth and	associate metals	tables, scatter	types of scientific
			sources of food.	damages teeth and	with being good	graphs, bar and line	enquiries to answer
				now to look after	conductors	graphs.	questions, including
			Pupils might work	them.			recognising and
			scientifically by:		Pupils might work	-deciding how to	controlling
				-drawing and	scientifically by:	record and present	variables where
			Using simple	discussing their		evidence.	necessary
			secondary sources	ideas about the			
			(such as	digestive system	-Reporting on	- recording	
			identification	and compare them	findings from	observations e.g.	
			sheets) to name	with models or	enquiries, including	using annotated	
			living things.		oral and written	photographs,	
				images	explanations,	videos, labelled	
			-Describing the		displays or	diagrams,	
			characteristics they		presentations of	observational	
			used to identify a		results and	drawings, labelled	
			living thing.		conclusions.	scientific diagrams	
			0 0.			or writing.	
			-Describing the			0.	
			characteristics they			-recording	
			used to identify a			measurements e ø	
			living thing			using tables tally	
						charts har charts	
						line granhs and	
						scattor graphs	
						scatter graphs.	
						- recording	

		Explore the natural world around them, making observations and	made - Identify and name a variety of			something vibrating - recognise that vibrations from	properties, including their hardness, solubility, transparency,	
		expected level of development will: -	between an object and the material from which it is			sounds are made, associating some of them with	group together everyday materials on the basis of their	
	Scientific Enquiry skills and Concepts Progression	children will:	n this unit, the children will: - Distinguish			in this unit, the children will: - identify how	n this unit, the children will: - Compare and	
	NC Strand		Everyday Materials			Sound	Properties and Changes of Materials	
			different to my grandparents when they were children?	London change our capital forever?	civilisations appear?	Romans so successful and were they all rotten?	remember the Maya?	what was life like during WWII?
Spring Term	Торіс	What could be in this egg?	Houses and Homes - how is my home	Fire, Fire! How did the Great Fire of	Ancient Civilisations - where did the first	Rotten Romans? - why were the	Marvellous Mayans - why do we	World War II and the Home front -
							understanding, supports or refutes their answer.	
							secondary sources and their scientific	
							evidence e.g. from other groups,	
							they discuss whether other	
							secondary sources. When doing this,	
							information they have gained from	
							measurements they have taken or	
							observations they	
							- answering their own and others'	
							investigations.	
							cannot be answered through	
							questions that	
							- Using secondary	
							diagrams and classification keys.	
							using tables, Venn diagrams, Carroll	
							classifications e.g.	

	drawing pictures of	everyday materials,		sounds travel	conductivity	
	animals and plants;	including wood,		through a medium	(electrical and	
		plastic, glass, metal,		to the ear	thermal), and	
	Know some	water, and rock			response to	
	similarities and			- find natterns	magnets	
	differences	- Describe the		hetween the nitch	magnets	
	hotwoon the	simple physical		of a sound and	Know that some	
	petween the	simple physical		fastures of the	- KIIOW LIIAL SOITIE	
	natural world	properties of a				
	around them and	variety of everyday		object that	dissolve in liquid to	
	contrasting	materials		produced it	form a solution,	
	environments,	- Compare and			and describe how	
	drawing on their	group together a		<ul> <li>find patterns</li> </ul>	to recover a	
	experiences and	variety of everyday		between the	substance from a	
	what has been read	materials on the		volume of a sound	solution	
	in class; -	basis of their simple		and the strength of		
		physical properties		the vibrations that	- Use knowledge of	
	Understand some	. ,		produced it	solids, liquids and	
	important	Pupils might work		•	gases to decide	
	processes and	scientifically by		- recognise that	how mixtures might	
	changes in the	-Using observations		sounds get fainter	he senarated	
	natural world	and ideas to		as the distance	including through	
	around them	current answers to		from the sound	filtoring cioving	
	including the	suggest answers to			and even erating	
	including the	questions.		source increases	and evaporating	
	seasons and	A 1 1 1 1			C.	
	changing states of	-Asking simple		Pupils might work	- Give reasons,	
	matter.	questions and		scientifically by:	based on evidence	
		recognising that			from comparative	
		they can be		-Pattern seeking	and fair tests, for	
		answered in			the particular uses	
		different ways.		-Recording findings	of everyday	
				using simple	materials, including	
		-Performing simple		scientific language,	metals, wood and	
		tests.		drawings, labelled	plastic	
				diagrams, keys, bar		
				charts and tables.	- Demonstrate that	
					dissolving, mixing	
				-Comparative	and changes of	
				testing Making	state are reversible	
				systematic and	changes	
				careful		
				observations and	- Explain that some	
				where appropriate	changes result in	
				taking accurate	the formation of	
				taking accurate		
				measurements	new materials, and	
				using standard	that this kind of	
				units, using a range	change is not	
				of equipment	usually reversible,	
				including	including changes	
				thermometers and	associated with	
				data loggers.	burning and the	
					action of acid on	
					bicarbonate of soda	
					Pupils might work	

						scientifically by: -Planning a scientific enquiry to answer a question recognising & controlling variables -making systematic and careful observations. - using a range of equipment for measuring length, time, temperature	
						and capacity. - using standard units for their measurements.	
Торіс	Which is the smallest minibeast?	Comparison Study Go Wild! Christopher Columbus and Robert Falcon Scott - how have voyages of discovery changed over time?	Let it grow - how do living things grow and change over time?	Rainforests - what's so special about the rainforests?	Water Worlds - how did water travel change the world?	Our changing world - why should I care about deforestation?	WWII - why was winning the Battle of Britain so important?
NC Strand		Animals Including	Animals Including	Plants	Living Things and their Habitats		Light
Scientific Enquiry skills and Concepts Progression	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:		In this unit, the children will:
	Children at the expected level of development will: - Explore the natural	-Identify and name a variety of common animals including fish, amphibians.	-find out about and describe the basic needs of animals, including humans, for survival (water	-Identify and describe the functions of different parts of flowering plants:	-recognise that living things can be grouped in a variety of ways		-recognise that light appears to travel in straight lines
	world around them, making observations and drawing pictures of animals and plants;	reptiles, birds and mammals - Identify and name a variety of common animals that are carnivores.	food and air) - describe the importance for humans of exercise, eating the right	roots, stem/trunk, leaves and flowers - Explore the requirements of plants for life and	- explore and use classification keys to help group, identify and name a variety of living things in their local		- use the idea that light travels in straight lines to explain that objects are seen because they give out or
	Know some similarities and differences	herbivores and omnivores - Describe and	amounts of different types of food, and hygiene	growth (air, light, water, nutrients from soil, and room	and wider environment		reflect light into the eye
	between the natural world around them and contrasting	compare the structure of a variety of common animals (fish,	- notice that animals, including humans, have	to grow) and how they vary from plant to plant	- recognise that environments can change and that this can sometimes		- explain that we see things because light travels from light sources to our

	environments,	amphibians,	offspring which	- Investigate the	pose dangers to	eyes or from light
	drawing on their	reptiles, birds and	grow into adults	way in which water	living things.	sources to objects
	experiences and	mammals, including	0	is transported	0 0	and then to our
	what has been read	nets)	- find out about and	within plants	Pupils might work	eves
	in class: -	p 0 (0)	describe the basic	internet protecto	scientifically by:	0,00
	III Class,	Pupils might work	needs of animals	- Evalore the part	<u>scientificany by</u> .	- use the idea that
	Understand some	<u>r upils might work</u>	including humans	that flowers play in	Using socondany	light travels in
	interstant some	SCIENCINCAILY DY	for our wheel (mater	that nowers play in		iigiit tiaveis iii
	important		for survival (water,	the life cycle of	sources to research	straight lines to
	processes and	-Gathering and	food and air)	flowering plants,	questions that	explain why
	changes in the	recording data to		including	cannot be	shadows have the
	natural world	help in answering	Pupils might work	pollination, seed	answered through	same shape as the
	around them,	questions,.	scientifically by	formation and seed	investigations.	objects that cast
	including the			dispersal.		them.
	seasons and	-Observing closely	-Classifying using		-Grouping and	
	changing states of	using simple	simple prepared	Pupils might work	classifying.	Pupils might work
	matter.	equipment.	tables and sorting	scientifically by:	Gathering and	scientifically by:
			rings.		recording	
		-Using observations		- Using secondary	classifying and	-Taking
		and ideas to		sources to research	nrecenting data in a	measurements
		suggest answers to		questions that	variaty of ways	using a range of
		suggest answers to		questions triat	vallety OF Wdys.	using a range or
		questions.		through	Desculto - for dis-	
				unrougn	- Recording findings	equipment, with
				investigations.	using scientific	increasing accuracy
				<ul> <li>Recording findings</li> </ul>	language, drawings,	and precision,
				using simple	labelled diagrams,	taking repeat
				scientific language.	keys, bar charts and	readings when
					tables. Identifying,	appropriate.
				-fair	classifying and	
				testing/observations	grouping.	-Planning different
				over time	0 0.	types of scientific
				Using	-Gathering	enquiries to answer
				straightforward	recording and	questions including
				Straightforward	recording and	questions, including
				scientific evidence	classifying data.	recognising and
				to answer questions		controlling
				or to support their		variables where
				tindings.		necessary.
				-Comparative		
				testing Set up		
				simple practical		
				enquiries,		
				comparative and		
				fair tests		
				iun (CStS.		
				Deporting or		
				-Reporting on		
				tindings from		
				enquiries, including		
				oral and written		
				explanations,		
				displays or		
				presentations of		
				results and		
				conclusions.		

Summer Term	Торіс	Is everyone good in the land of fairy tales?	Food glorious food - healthy diet, healthy mind, means healthy me.	At the seaside - how have British holidays changed over time?	Ancient Egypt - how much did the Ancient Egyptians achieve?	Angry Earth - what links mountains, volcanoes and earthquakes?	Change in Monarchy - how did the ruling Monarchs influence change in Britain?	Crime and Punishment - how has this aspect of social history changed over time?
	NC Strand		Plants	Plants	Light	States of Matter	Living Things and their Habitats	Living Things and their Habitats
	Scientific Enquiry skills and Concepts Progression	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:
		Children at the	-Identify and name	-observe and	-Recognise that they	-compare and	-describe the	-describe how living
		expected level of development will: -	a variety of common wild and	describe how seeds and bulbs grow into	need light in order to see things and	group materials together, according	differences in the life cycles of a	things are classified into broad groups
		E-mlana tha matural	garden plants,	mature plants	that dark is the	to whether they are	mammai, an	according to
		Explore the natural	including deciduous		absence of light	solias, liquias or	amphibian, an	common
		world around them,	and evergreen	- find out and	Netice that light is	gases	insect and a bird	observable
		nidking	trees	plants pood water	- NOTICE that light is	Observe that	doscribo tho life	based on
		drawing pictures of	- Identify and	light and a suitable	surfaces	some materials	- describe the me	similarities and
		animals and plants.	describe the basic	temperature to	Surfaces	change state when	reproduction in	differences
			structure of a	grow and stay	- Recognise that	they are heated or	some plants and	including
		Know some	variety of common	healthy.	light from the sun	cooled, and	animals.	microorganisms,
		similarities and	flowering plants,	,	can be dangerous	measure or		plants and animals
		differences	including trees	Pupils might work	and that there are	research the	Pupils might work	
		between the		scientifically by:	ways to protect	temperature at	scientifically by:	- give reasons for
		natural world	Pupils might work		their eyes	which this happens		classifying plants
		around them and	scientifically by:	-Identifying and		in degrees Celsius	- Using secondary	and animals based
		contrasting		classifying.	- Recognise that	(°C)	sources to research	on specific
		environments,	-Observing closely		shadows are formed		questions that	characteristics
		drawing on their	using simple	-Gathering and	when the light from	<ul> <li>Identify the part</li> </ul>	cannot be	
		experiences and	equipment.	recording data to	a light source is	played by	answered through	Pupils might work
		what has been read in class; -		help in answering questions.	blocked by an opaque object	evaporation and condensation in the	investigations.	scientifically by:
		I la denster des res		Deufermation estimate	Final anatta ana in	water cycle and	- Reporting and	-Recording data
		Understand some		-Performing simple	- Find patterns in	associate the rate	from onguirios in	increasing
		important processes and		lesis.	cite way that the		oral and written	comployity using
		changes in the		- Using practical	change	temperature	forms such as	scientific diagrams
		natural world		resources provided	change	Pupils might work	displays and other	and labels
		around them.		to gather evidence	Pupils might work	scientifically by:	presentations.	classification keys.
		including the		to answer	scientifically by:	<u></u>	using appropriate	tables. scatter
		seasons and		questions	· · · · · ·	-Recording findings	scientific language.	graphs, bar and line
		changing states of		generated by	- Pattern seeking.	using simple		graphs.
		matter.		themselves or the		scientific language,	- Recording data	
				teacher.		drawings, labelled	and results of	-Taking
						diagrams, keys, bar	increasing	measurements,
				-Carrying out: tests		charts and tables.	complexity using	using a range of
				to classify;			scientific diagrams	scientific
				comparative tests;		-Comparative and	and labels,	equipment, with
				pattern seeking;		tair testing.	classification keys,	increasing accuracy
				enquiries; and			tables, scatter	and precision,
				make observations		-ivlaking systematic	graphs, bar and line	taking repeat
				over time.		and careful	graphs.	readings when

					observations, and where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers		appropriate.
Торіс	How can we keep ourselves healthy?	Meet the Victorians - what was life like for children in England during the Victorian period?	Forest Fun - why are plants important to us all?	Brazil - an in depth country study	Remarkable Railways - how did the railways transform Rochdale, Heywood and beyond?	Changing Britain - how has life changed in Modern Britain?	Moving on - when and why do we experience transition in our lives?
NC Strand		Animals Including Humans	Living Things and their Habitats	Forces and Magnets		Living Things and their Habitats Animals Including Humans	Animals Including Humans
Scientific Enquiry skills and Concepts Progression	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:		In this unit, the children will:	In this unit, the children will:
-	Children at the	- Identify and name	-explore and	- Compare how		-describe the	-identify and name
	expected level of	a variety of	compare the	things move on		changes as humans	the main parts of
	development will: -	common animals including fish,	differences between things	different surfaces		develop to old age	the human circulatory system,
	Explore the natural world around them,	amphibians, reptiles, birds and	that are living, dead, and things	<ul> <li>Notice that some forces need contact</li> </ul>		Pupils might work scientifically by:	and describe the functions of the
	making observations and	mammals	that have never been alive	between two objects, but		- Pattern seeking	heart, blood vessels and blood
	drawing pictures of	-Identify and name		magnetic forces can		- Planning a	
	animals and plants;	a variety of common animals	<ul> <li>identify that most living things live in</li> </ul>	act at a distance		scientific enquiry to answer a question	<ul> <li>recognise the impact of diet,</li> </ul>
	Know some	that are carnivores,	habitats to which	- Observe how		recognising &	exercise, drugs and
	similarities and	herbivores and	they are suited and	magnets attract or		controlling	lifestyle on the way
	differences between the	omnivores	describe how different habitats	repel each other and attract some		variables	their bodies function
	natural world	-Describe and	provide for the	materials and not		-Taking	
	around them and	compare the	basic needs of	others		measurements,	- describe the ways
	contrasting	structure of a	different kinds of			using a range of	in which nutrients
	environments,	variety of common	animals and plants,	- Compare and		scientific	and water are
	drawing on their	animals (fish,	and how they	group together a		equipment, with	transported within
	experiences and	amphibians,	depend on each	variety of everyday		increasing accuracy	animals, including
	what has been read	reptiles, birds and	other	materials on the		and precision,	numans.
	111 Cld55, -	nets)	- identify and name	they are attracted		readings when	Pupils might work
	Understand some	persj	a variety of plants	to a magnet, and		appropriate	scientifically by:
	important	Pupils might work	and animals in their	identify some		- ppropriater	Ny
	processes and	scientifically by:	habitats, including	magnetic materials			-Recording data
	changes in the	<u>````</u>	micro-habitats				and results of
	natural world	-Gathering and		- Describe magnets			increasing
	around them,	recording data to	- describe how	as having two poles			complexity using

	including the	help in answering	animals obtain their			scientific diagrams	
	seasons and	questions,.	food from plants	- Predict whether		and labels,	
	changing states of		and other animals,	two magnets will		classification keys,	
	matter.	-Observing closely	using the idea of a	attract or repel each		tables, scatter	
		using simple	simple food chain,	other, depending on		graphs, bar and line	
		equipment.	and identify and	which poles are		graphs.	
			name different	facing			
		-Using observations	sources of food			-Taking	
		and ideas to		Pupils might work		measurements,	
		suggest answers to	Pupils might work	scientifically by:		using a range of	
		questions.	scientifically by:			scientific	
				-Classifying and		equipment, with	
			-Gathering and	comparing		increasing accuracy	
			recording data to			and precision,	
			help in answer	-Gathering,		taking repeat	
			questions.	recording,		readings when	
				classitying and		appropriate	
				presenting data in a			
				variety of ways to			
				help in answering			
				questions.			
				Ling coorder.			
				-Using secondary			
				sources to research			
				questions that			
				through			
				investigations			
				แพรงแหลงเป็นเป็น			
				- Recording simple			
				findings using			
				simple scientific			
				language, drawings			
				labelled diagrams.			
				keys, bar charts and			
				tables.			
				- Asking relevant			
				questions and using			
				different types of			
				scientific enquiries			
				to answer them.			