

<u>EYFS</u>

Year Group	EYFS	Unit Title	Autumn Changes and Decay Experimentation - Spells and Potion	
Builds on	-	Prepares for	Seasonal Changes (Y1 T2)	
Key Skills Covere	ed	Main Knowledge	Gained	
and drawing pict Know some simi world around th their experience Understand som the natural worl changing states Manage their ow including dressir importance of he Make comments	aral world around them, making observation tures of animals and plants. larities and differences between the natur em and contrasting environments, drawin s and what has been read in class. The important processes and changes in d around them, including the seasons and of matter. Win basic hygiene and personal needs, ing, going to the toilet and understanding t ealthy food choices. S about what they have heard and ask rify their understanding.	ral g on		
Key Vocabul	-			
Weather, Se	asons			

Willen Primary School Curriculum Mapping Tool Science



Year Group	EYFS	Unit Title	Hibernation- Winter Changes		
Builds on	-	Prepares for	Seasonal Changes (Y1 T2)		
Key Skills Covere	d	Main Knowledge	Gained		
	ral world around them, making observations ures of animals and plants.				
	arities and differences between the natural				
world around them and contrasting environments, drawing on their experiences and what has been read in class.					
Understand som	e important processes and changes in				
the natural world	d around them, including the seasons and				
changing states of	of matter.				
Manage their ow	n basic hygiene and personal needs,				
including dressin	g, going to the toilet and understanding the				
importance of he	ealthy food choices.				
Make comments	about what they have heard and ask				
questions to clar	ify their understanding.				
Key Vocabula	ary:				
Weather, Sea	asons				



Year Group	EYFS	Unit Title	Similarities and differences in materials	
			(Biscuit experiment)	
Builds on	-	Prepares for	Materials (Y1 T3)	
Key Skills Covere	d	Main Knowledge	Gained	
Explore the natu	ral world around them, making observations			
and drawing pict	ures of animals and plants.			
Know some simi	larities and differences between the natural			
world around th	em and contrasting environments, drawing on			
their experience	s and what has been read in class.			
Understand som	e important processes and changes in			
the natural world	d around them, including the seasons and			
changing states	of matter.			
Manage their ov	n basic hygiene and personal needs,			
including dressir	g, going to the toilet and understanding the			
importance of h	ealthy food choices.			
Make comments	about what they have heard and ask			
questions to clar	ify their understanding.			
Key Vocabul	ary:			
Touch • Shiny • Hard • Rough				



Year Group	EYFS	Unit Title	Chick Life Cycles- Spring Kate Humble
Builds on	-	Prepares for	Animals including Humans (Y1 T5)
Key Skills Covere	d	Main Knowledge	
and drawing pict Know some simil world around the their experiences Understand som the natural world changing states of Manage their ow including dressin importance of he Make comments	ral world around them, making observations ures of animals and plants. arities and differences between the natural em and contrasting environments, drawing on s and what has been read in class. e important processes and changes in d around them, including the seasons and of matter. m basic hygiene and personal needs, g, going to the toilet and understanding the ealthy food choices. about what they have heard and ask ify their understanding.		
Key Vocabula Chick, feathe	ary: rs, beak, newborn, lifecycle		



Year Group	EYFS	Unit Title	My Body Parts of the Human Body Keeping Healthy and Importance of exercise Neil Armstrong
Builds on	-	Prepares for	Our Bodies (Y1 T1)
Key Skills Covere		Main Knowledg	
•	ral world around them, making o		
	cures of animals and plants.		
Know some simi	larities and differences between t	he natural	
	em and contrasting environments		
•	s and what has been read in class		
	e important processes and chang		
	d around them, including the seas	sons and	
changing states			
-	vn basic hygiene and personal nee		
-	ng, going to the toilet and underst	anding the	
•	ealthy food choices.		
	about what they have heard and	ask	
questions to clar	ify their understanding.		
Key Vocabul	ary: Alive		
 Animal 			
• Food			
 Unwell 			
 Smell 			
 Touch 			
• Hear			
 Taste 			
• See			
 Senses 			



Year Group	EYFS	Unit Title	What do plants need to grow? How are they similar or different? Minibeasts: Lifecycle of a butterfly Beatrix Potter
Builds on	-	Prepares for	Plants (Y1 T6)
Key Skills Covere	ed	Main Knowledg	e Gained
Explore the natu	ural world around them, making observations		
•	tures of animals and plants.		
	ilarities and differences between the natural		
world around th	nem and contrasting environments, drawing on		
	es and what has been read in class.		
	ne important processes and changes in		
the natural worl	ld around them, including the seasons and		
changing states			
Manage their ov	wn basic hygiene and personal needs,		
including dressi	ng, going to the toilet and understanding the		
importance of h	ealthy food choices.		
Make comment	s about what they have heard and ask		
questions to cla	rify their understanding.		
Key Vocabu	lanv		
• Plant	iai y.		
• Seed			
• Grow			
• Grow • Flower			
• Leaf			



<u>Year One</u>

Year Group	1	Unit Title	Human Body and Senses (T1) (Scientist Florence Nightingale)	
Builds on	EY	Prepares for	Animals and Mammals Y2	
Key Skills Covered		Main Knowledge	Gained	
 Gather ar 	nd record data to help in recording questions	 Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. 		
Key Vocabula taste, hea		wrist, hand, back, o	hest, hip, leg, knee, ankle, foot wing, beak, tail, fin sight, smell, touch,	

Year Group	1	Unit	Title	Seasonal Changes T2+4 (Scientist Michael Fish/ Benjamin Franklin)	
Builds on		Prepa	ares for	T4 Seasonal Changes.	
Key Skills Covered		Main	Knowledge (Gained	
Use observations and ideas to suggest answers to questions		•	• Observe and describe weather associated with the seasons and how day length		
(WS)		varies			
			 Observe changes across the four seasons 		
Key vocabulary: sea	Key vocabulary: season, spring, summer, autumn, winter, month, year, day, night, sun, moon, light, dark				

Willen Primary School Curriculum Mapping Tool Science



Year Group	1	Unit Title	Everyday Materials T3 (Scientist John Boyd)		
Builds on	EY's science	Prepares for	Term 3 Year 2 Uses of everyday materials		
Key Skills Covered		Main Knowledge Gair	ned		
 Identify and classify (WS) Perform simple tests. (W/S) 		 Identify and r glass, metal, 	 Distinguish between the object and the materials from which it is made. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock. 		
		Compare and	simple physical properties of a variety of everyday materials group together a variety of everyday materials on the basis of physical properties		
Key vocabu	lary: hard, soft, rough, smooth, sh	iny, dull, bendy, stiff, wood, plastic, glas	s, paper, metal, rock		

Year Group	1	Unit Title	Animals including Humans- offspring. T5 (Scientist Roger Airliner)	
Builds on	EY's	Prepares for	Y2 T1 Animals including humans (basic needs of offspring)	
Key Skills Covered		Main Knowledge	Gained	
	questions and recognise that they can be in different ways. (WS)	reptiles, k Identify a and omni Describe	nd name a variety of common animals including fish, amphibians, birds and mammals nd name a variety of common animals that are carnivores, herbivores vores and compare the structure of a variety of common animals (fish, ns, reptiles, birds and mammals, including pets)	
Key vocabulary	Key vocabulary: amphibians, fish, reptiles, mammals, birds (+ 1 example of each) herbivore, omnivore, carnivore			



•	Plants In Y2 Gained and name a variety of common wild and garden plants, including
Identify a	
•	and name a variety of common wild and garden plants, including
 Identify a 	is and evergreen trees and describe the basic structure of a variety of common flowering cluding trees
 Identify and describe the basic structure of a variety of common flower plants, including trees possom), petals, fruit, bulb, seed, roots, stem, trunk, branches 	



<u>Year Two</u>

Year Group	2	Unit Title	Animals including humans (basic needs of offspring) T1 Elizabeth Garret-Anderson)			
Builds on	Y1T1 Human body and senses.	Prepares for	T4 Animals including humans (food and Hygiene)			
Key Skills Covered		Main Knowledge	Gained			
 Gather and record data to help in answering questions including from secondary sources of information (Year 2 focus) (WS) 		and air) Describe	the basic needs of animals, including humans, for survival (water, food the importance for humans of exercise, eating the right amounts of types of food, and hygiene			
Key vocabul	ا Key vocabulary: survival, water, air, food reproduce, adult, baby, offspring, kitten, calf, puppy,					



Year Group	2	Unit Title	Living things and their habitats T2 +5 (Scientist Rachel Carson and Jane Colden)
Builds on	Plants Y1 T6	Prepares for	Plants T4 Y2
Key Skills Cover	red	Main Knowledg	e Gained
 Identify group and classify. (WS) Identify a micro-ha Identify a describe animals a Explore a things th Describe 		micro-h Identify describe animals Explore things t Describ	and name a variety of plants and animals in their habitats, including abitats that most living things live in habitats to which they are suited and e how different habitats provide for the basic needs of different kinds of and plants, and how they depend on each other and compare the differences between things that are living, dead, and hat have never been alive e how animals obtain their food from plants and other animals, using a of a simple food chain, and identify and name different sources of food
Key vocabu	llary: living, dead, habitat, microhabi	tat, woodland, meadow, hedge	row, pond

Year Group	2	Unit Title	Uses of everyday materials T3 (Charles McIntosh)	
Builds on	Y1 Materials	Prepares for	Y5 materials properties and changes.	
Key Skills Covere	ed	Main Knowledge	Gained	
 Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum (Year 2 focus) (WS) Communicate his/her ideas, what he/she does and what he/she finds out in a variety of ways (WS) 		changed • Identify a	 Describe how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching 	
	ary: brick, fabric, elastic, foil, property, solid, wat e, bounce	terproof, absorbent,	opaque, transparent, squash, bend, flexible, twist, stretch push, pull,	



Year Group	2	Unit Title	Animals including humans food and hygiene T4 (Louis Pasteur)	
Builds on	Y2T1	Prepares for	Animals including humans nutrition (Y3 T4)	
Key Skills Covered		Main Knowledge	Gained	
•	Communicate ideas in a variety of ways. (WS)	 Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene 		
Key vocabulary: food chain, prey, predator, camouflage, protection exercise, hygiene, balanced diet				

Year Group	2	Unit Title	Plants T5 (Tim Smit)
Builds on	Plants Y1 T6	Prepares for	Plants Y3 T6
Key Skills Covered		Main Knowledge	Gained
 Use his/her observations and ideas to suggest answers to questions noticing similarities, differences and patterns (Year 2 focus) (WS) Use simple comparative tests (WS) Use simple equipment to observe closely including changes over time. (WS) 		Describe	and describe how seeds and bulbs grow into mature plants how plants need water, light and a suitable temperature to grow and hy, and describe the impact of changing these
Key vocabulary:	growth, germinate, light, temperature reprod	luce, lifecycle	



<u>Year Three</u>

Year Group	3	Unit Title	Animals including humans Skeleton T1 (Dorothy Hodgkin)
Builds on	Y2 T4 (Exercise food and hygiene)	Prepares for	Digestion (T4 Nutrition)
Key Skills Covere	d	Main Knowledge	e Gained
 Set up simple practical enquiries, comparative and fair tests (Year 3 focus) Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers (Year 3 focus) 			that humans and some other animals have skeletons and muscles for , protection and movement
Key vocabulary: skeleton, skull, bones, muscles, movement, support, protection, nutrition			

Key Skills Covered Main Knowle • Find patterns in the way that the size of shadows change • Reco abse • Make systematic and careful observations, take accurate measurements. (WS) • Reco prote • Ask scientific enquiry to answer questions (WS) • Reco	r Group 3	Unit Title	Light T2 (Thomas Edison)
 Find patterns in the way that the size of shadows change Make systematic and careful observations, take accurate measurements. (WS) Ask scientific enquiry to answer questions (WS) Reco prote Reco 	ds on Se	Prepares for	Light in Y6 T2
 change Make systematic and careful observations, take accurate measurements. (WS) Ask scientific enquiry to answer questions (WS) Reco Reco 	Key Skills Covered		Gained
•	 Find patterns in the way that the size of shadows change Make systematic and careful observations, take accurate measurements. (WS) 		e that he/she needs light in order to see things and that dark is the of light at light is reflected from surfaces e that light from the sun can be dangerous and that there are ways to yes e that shadows are formed when the light from a light source is y a solid object



Year Group	3	Unit Title	Forces and Magnets T3 (Isaac Newton)
Builds on	Uses of everyday materials (Y2 T3)	Prepares for	Forces Y5 T3
Key Skills Covered		Main Knowledge	Gained
 Report on a written exp results and Use results predictions 	ether two magnets will attract or repel. (WS) findings from enquiries, including oral and lanations, displays or presentations of conclusions (Year 3 focus) (WS) to draw simple conclusions, make for new values, suggest improvements and er questions (Year 3 focus) (WS)	can act at Observe h and not o Compare whether t	at some forces need contact between two objects, but magnetic forces a distance now magnets attract or repel each other and attract some materials thers and group together a variety of everyday materials on the basis of they are attracted to a magnet, and identify some magnetic materials magnets as having two poles
Key vocabulary: force, contact, surface, magnetic, attract, repel, poles			

Year Group	3	Unit Title	Animals including humans. Nutrition T4 (Elsie Widdowson)	
Builds on	The Skeleton (T1)	Prepares for	Digestion (Y4 T1)	
Key Skills Covered		Main Knowledge	Main Knowledge Gained	
Gather, record, classify and present data in a variety of ways to help in answering questions (Year 3 focus)		 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 		
Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables (Year 3 focus)		•		
Key vocabulary: skeleton, skull, bones, muscles, movement, support, protection, nutrition			nutrition	



Year Group	3	Unit Title	Rocks T5 (Mary Anning)		
Builds on	Uses of everyday materials (Y2 T3)	Prepares for	Properties and changes of materials (Y5 T1)		
Key Skills Covered		Main Knowledge	Main Knowledge Gained		
questions	htforward scientific evidence to answer . (WS) ematic and careful observations. (NC)	appeararDescribetrapped v	 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 		
Key vocabular	y: soils, organic matter, fossil, crystal, sandsto	ne, granite, marble, p	oumice absorbent, crumble sedimentary, layer, sediment igneous,		
magma, la	ava, gas bubbles (tiny holes/spaces) metamor	phic, change, squeeze	e, pressure		

Year Group	3	Unit Title	Plants T6 (Janaki Ammal)
Builds on	Year 2 T6 Plants	Prepares for	Habitats (y4 T6)
Key Skills Covered		Main Knowledge	Gained
 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables 		stem/trur Explore a water, nur plant Investigat Explore th	nd describe the functions of different parts of flowering plants: roots, nk, leaves and flowers nd describe the requirements of plants for life and growth (air, light, trients from soil, and room to grow) and how they vary from plant to e the way in which water is transported within plants ne part that flowers play in the life cycle of flowering plants, including n, seed formation and seed dispersal
Key vocabulary	: air, water, transportation, nutrients, soil, repr	oduction, seed forr	nation, seed dispersal, pollination



<u>Year Four</u>

Year Group	4	Unit Title	Animals Including Humans (Digestion) T1 (William Beaumont)
Builds on	Animals Including Humans – Nutrition and the skeleton (Y3 T1/4)	Prepares for	Teeth in Term 2
Key Skills Covere	ed	Main Knowledge	Gained
 Ask relevant questions and use different types of scientific enquiries to answer them (Year 4 focus) Set up simple practical enquiries, comparative and fair tests (Year 4 focus) 		 Main Knowledge Gained Describe the simple functions of the basic parts of the digestive system in humans 	
Key vocabulary: mouth, tongue, teeth, oesophagus, stomach, small intestine, large intestine, nutrients, absorb			

Year Group	4	Unit Title	Animals Including Humans (Teeth) T2 (Pierre Fauchard)
Builds on	Animals Including Humans (Digestion) Y4 T1	Prepares for	Animals Including Humans – Gestation and Puberty (Y5 T6)
Key Skills Covered		Main Knowledge	Gained
 Identify differences, similarities or changes related to simple scientific ideas and processes (Year 4 focus) Set up simple practical enquiries, comparative and fair tests (Year 4 focus) 			ne different types of teeth in humans and their simple functions and interpret a variety of food chains, identifying producers, and prey
Key vocabulary	: canine, incisor, molar producer, consumer, ap	ex predator	



Year Group	4	Unit Title	Sound T3 (Alexander Graham Bell)
Builds on	Light Y3 T2	Prepares for	Electricity Y4 T5
Key Skills Covere	d	Main Knowledge	Gained
Gather, record, classify and present data in a variety of ways to help in answering questions (Year 4 focus) Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables (Year 4 focus) Use straightforward scientific evidence to answer questions or to support his/her findings (Year 4 focus)		vibrating • Recognise • Find patter produced • Find patter that prod	e that vibrations from sounds travel through a medium to the ear erns between the pitch of a sound and features of the object that I it erns between the volume of a sound and the strength of the vibrations luced it e that sounds get fainter as the distance from the sound source
Key vocabulary: vibration, wave, volume, pitch, tone, insulation			

Year Group	4	Unit Title	States of Matter T4 (Rutherford)		
Builds on	Rocks Y3 T5	Prepares for	Properties and Changes of Materials Y5 T1		
Key Skills Covered		Main Knowledge	Gained		
 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers (Year 4 focus) Identify differences, similarities or changes related to simple scientific ideas and processes (Year 4 focus) 		liquids or Observe t measure (°C) Identify t	and group materials together, according to whether they are solids, gases that some materials change state when they are heated or cooled, and or research the temperature at which this happens in degrees Celsius he part played by evaporation and condensation in the water cycle and the rate of evaporation with temperature		
Key vocabulary	Key vocabulary: solid, liquid, gas, evaporation, condensation, particle, temperature, freezing, heating				



Unit Title	Electricity T5 (Michael Faraday)
Prepares for	Light Y6 T2 and Electricity Y6 T5
Main Knowledge	Gained
 Construction Identify whether Recognistion Recognistion 	common appliances that run on electricity ct a simple series electrical circuit, identifying and naming its basic parts, g cells, wires, bulbs, switches and buzzers whether or not a lamp will light in a simple series circuit, based on or not the lamp is part of a complete loop with a battery se that a switch opens and closes a circuit and associate this with whether lamp lights in a simple series circuit se some common conductors and insulators, and associate metals with od conductors
	Prepares for Main Knowledge Identify Construct including s Identify whether Recognis or not a Recognis

Year Group	4	Unit Title	Living Things and their Habitats T6 (Dian Fossey)	
Builds on	Living things and their Habitats (Y2 T2 + 5)	Prepares for	Living Things and their Habitats Y5 T5	
Key Skills Covered	Key Skills Covered		Gained	
 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions (Year 4 focus) Gather, record, classify and present data in a variety of ways to help in answering questions (Year 4 focus) 		 Main Knowledge Gained 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 and have an impact on living things 		
Key vocabulary	Key vocabulary: vertebrates, invertebrates (+ 1 example of each) environment, habitat, classification key			



<u>Year Five</u>

Builds on States of Matter Y4 T4 Prepares for Electricity Y6 T5 and 6 Key Skills Covered Main Knowledge Gained • Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary (Year 5 focus) • 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 • Use test results to make predictions to set up further comparative and fair tests (Year 5 focus) • Report and present 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 (Year 5 focus) • Use test results to recover a substance from comparative and fair tests, for the particular uses of everyday materials, including through filtering, sieving and evaporating • Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus) • Demonstrate that dissolving, mixing and changes of state are reversible changes • Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus) • 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	Year Group	5	Unit Title	Properties and changes of materials T1 (Spencer Silver)
 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary (Year 5 focus) Use test results to make predictions to set up further comparative and fair tests (Year 5 focus) Report and present 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 (Year 5 focus) Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus) 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 Recognise 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 Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic Demonstrate that dissolving, mixing and changes of state are reversible changes Explain that some changes result in the formation of new materials, and that 	Builds on	States of Matter Y4 T4	Prepares for	Electricity Y6 T5 and 6
 questions, including recognising and controlling variables where necessary (Year 5 focus) Use test results to make predictions to set up further comparative and fair tests (Year 5 focus) Report and present 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 (Year 5 focus) Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus) properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets Recognise 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 Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic Demonstrate that dissolving, mixing and changes of state are reversible changes Explain that some changes result in the formation of new materials, and that 	Key Skills Covered		Main	Knowledge Gained
burning and the action of acid on bicarbonate of soda	 questions, variables w Use test re comparativ Report and conclusion and degree such as dis Identify sci 	 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary (Year 5 focus) Use test results to make predictions to set up further comparative and fair tests (Year 5 focus) Report and present 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 (Year 5 focus) Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus) 		es, including their hardness, solubility, transparency, conductivity I and thermal), and response to magnets e that some materials will dissolve in liquid to form a solution, and how to recover a substance from a solution vledge of solids, liquids and gases to decide how mixtures might be d, including through filtering, sieving and evaporating ons, based on evidence from comparative and fair tests, for the r uses of everyday materials, including metals, wood and plastic rate that dissolving, mixing and changes of state are reversible changes nat some changes result in the formation of new materials, and that of change is not usually reversible, including changes associated with



Year Group	5	Unit Title	Earth and Space T2 (Mary Somerville)	
Builds on	Seasonal Changes Y1 T2 and 4	Prepares for	Forces Y5 T3	
Key Skills Covered		Main Knowledge	Gained	
 Report and present 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 (Year 5 focus) 		 Main Knowledge Gained 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 		

Year Group	5	Unit Title	Forces T3 (Emma England)
Builds on	Earth and Space Y5 T2 Forces and Magnets Y3 T3	Prepares for	-
equipment taking repe • Record dat scientific d	urements, using a range of scientific , with increasing accuracy and precision, eat readings when appropriate (Year 5 focus) a and results of increasing complexity using iagrams and labels, classification keys, tables, phs, bar and line graphs (Year 5 focus)	 Main Knowledge Gained Explain that unsupported objects fall towards the Earth because of the f gravity acting between the Earth and the falling object Identify the effects of air resistance, water resistance and friction, that a between moving surfaces Recognise that some mechanisms, including levers, pulleys and gears, al smaller force to have a greater effect 	
Key vocabulary	: air resistance, water resistance, friction, gravi	ty lever, gear, pulle	y, Newtons



Year Group	5	Unit Title	Living things and their Habitats- Life Cycles of a mammal, amphibian, bird and insect T4 (Terri Irwin)
Builds on	Living Things and their Habitats Y4 T6	Prepares for	Living things and their Habitats – Reproduction of plants and animals Y5 T5
Key Skills Covere	d	Main Knowledge	Gained
 Report and present 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 (Year 5 focus) Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus) 		Describe and a bir	the differences in the life cycles of a mammal, an amphibian, an insect d
Key vocabula	ary: life process, reproduction, offspring		

Year Group	5	Unit Title	Living things and their Habitats – Reproduction of plants and animals T5 (Agnes Arber)
Builds on	Living things and their Habitats- Life Cycles of a mammal, amphibian, bird and insect T4	Prepares for	Living things and their Habitats Y6 T4
Key Skills Covered		Main Knowledge	Gained
 Report and present 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 (Year 5 focus) Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. 		• Describe	the life process of reproduction in some plants and animals
Key vocabulary	y: life process, reproduction, offspring		



'ear Group	5	Unit Title	Animals Including Humans – Gestation and Puberty T6 (Sir David Attenborough)
Builds on	Animals including Humans Teeth Y4 T2	Prepares for	Evolution and Inheritance Y6 T1
key Skills Covered		Main Knowledge	Gained
 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 5 focus) Report and present 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 (Year 5 focus) 			the changes as humans develop to old age



<u>Year Six</u>

Year Group	6	Unit Title	Y6 T1 Evolution and Inheritance (Charles Darwin)
Builds on	Animals Including Humans – Gestation and Puberty Y5 T6	Prepares for	-
 Key Skills Covered Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs (Year 6 focus) Report and present findings from enquiries, including 		 Main Knowledge Gained 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 	
conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Key vocabulary: adaptation, evolution, characteristic, reprodu		Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution	



Year Group	6	Unit Title	Light and the Eye T2 (Alhazen)
Builds on	Animals Including Humans (Teeth) Y4 T2	Prepares for	Animals Including Humans (Blood and the Heart) T3
Key Skills Covered		Main Knowledge	Gained
 their own of and control Take measurequipment, taking reperior Use test rest 	ent types of scientific enquiries to answer or others' questions, including recognising ling variables where necessary (Year 6 focus) prements, using a range of scientific with increasing accuracy and precision, at readings when appropriate (Year 6 focus) sults to make predictions to set up further e and fair tests (Year 6 focus)	 Use the id because t Explain th from light Use the id 	e that light appears to travel in straight lines dea that light travels in straight lines to explain that objects are seen they give out or reflect light into the eye hat we see things because light travels from light sources to our eyes or c sources to objects and then to our eyes dea that light travels in straight lines to explain why shadows have the pe as the objects that cast them
Key vocabulary	refraction, reflection, spectrum, rainbow		

Prepares for	-	
Main Knowladge (
Main Knowledge Gained		
 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 		
	describe tRecognisebodies furDescribe t	



Year Group	6	Unit Title	Living things and their Habitats T4 (Carl Linnaeus)	
Builds on	Living things and their Habitats Y5 T4 and 5	Prepares for	-	
Key Skills Covered		Main Knowledge Gained		
 Report and present 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 (Year 6 focus) Group and classify things and recognise patterns Use appropriate scientific language and ideas from the national curriculum to explain, evaluate and communicate his/her methods and findings 		 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 		
Key vocabulary: characteristic, classification, organism, micro-organism				

Year Group	6	Unit Title	Electricity T5 and T6 (Nicolas Tesla)	
Builds on	Light T2 Electricity Y4 T5	Prepares for	-	
 Key Skills Covered Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary (Year 6 focus) Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 6 focus) Use test results to make predictions to set up further comparative and fair tests (Year 6 focus) 		 Main Knowledge Gained 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 		
Key vocabulary	: circuit - series, parallel voltage, volts, amps			

Willen Primary School Curriculum Mapping Tool Science

