




Witley C of E Infant School





Science Skills, Core Knowledge and Understanding Progression Pathway


Our high-quality science education builds upon a body of key foundational knowledge and concepts so our children are inspired to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. Science changes lives!

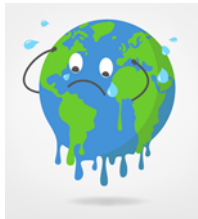

Great are the works of the Lord, studied by all who delight in them. Psalm 111:2

I know more, I remember more and I can do more at Witley!

no copyright infringement is intended	EYFS Prior Learning As a scientist:	Year 1 As a scientist:	Year 2 As a scientist:
	Inspiring Scientists: Steve Backshaw (British Naturalist)	Inspiring Scientists: Chris Packham (Naturalist) Sir Jonathan Hutchinson – Collector/Haslemere Museum	Inspiring Scientists: David Attenborough (Biologist and natural historian)
Working scientifically Across the year groups	I can explore the natural world around me, making observations and drawing pictures of animals and plants.	I can work scientifically by:  <ul style="list-style-type: none"> • asking simple questions and recognising that they can be answered in different ways • observing closely, using simple equipment • performing simple tests • identifying and classifying • using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions 	
		Key Scientific Vocabulary question, find out, observe, describe, test, compare, measure, length, height, mass/weight, time, temperature record, results, table, chart, pictograph, block graph, bar chart	
	I know some similarities and differences between the natural world around me and contrasting environments, drawing on my own experiences and what has been read in class	I can identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. I can also identify and describe the basic structure of a variety of common flowering plants and trees in my school environment and all around me.	
Year 1 Identifying Plants Year 2 Growing Plants		Key Scientific Vocabulary	Key Scientific Vocabulary
		leaves, trunk, branch, root, seed, bulb, flower, stem, wild, garden, deciduous, evergreen, observe, grow, native, weed, root, stem, leaves/leaf, bud, flower, petal, seed head, sunlight	compare, record, temperature, predict, measure, diagram, germinate, warmth, mature, suitable, classify
	I can understand some important processes and changes in the natural world around me, including the seasons and changing states of matter.	Enriching Texts – Book Corner	Enriching Texts – Book Corner
		Tree: Seasons Come, Seasons Go (Hegarty/Teckentrup) A Little Guide to Wild Flowers (Charlotte Voake) The Things That I LOVE about TREES (Chris Butterworth) The Last Tree (Ingrid Chabbert)	The Tin Forest (Helen Ward) A Seed Is Sleepy (Dianna Aston) All the Wild Wonders by Various Poets, Wendy Cooling Under the Canopy (Iris Volant and Cynthia Alonso)

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Animals including Humans Year 1 My Body Year 2 Growth and survival	<p>I can explore the natural world around me, making observations and drawing pictures of animals and plants.</p> 	<p>I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>I can identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets).</p> <p>I can identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p>	<p>I can notice that animals, including humans, have offspring which grow into adults.</p> <p>I can find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>I can describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> 
		Key Scientific Vocabulary	Key Scientific Vocabulary
	<p>I understand some important processes and changes in the natural world around me, including the seasons and changing states of matter.</p>	<p>fish, amphibian, reptile, bird, mammal head, face, ears, hair, eyes, nose, mouth, teeth, cheek, chin, neck, body, arms, hands, fingers, paws, fins, wings, legs, feet, toes, tail, skin, scales, fur, feathers herbivore, carnivore, omnivore see, look, hear, listen, touch, feel, taste, smell</p>	<p>reproduce, offspring, survival, water, food, air, shelter, exercise, fit, healthy, food, fruit, vegetables, meat, fish, eggs, nuts, pulses, beans, milk, cheese, bread, pasta, rice, butter, vegetable oil, olive oil, metamorphosis, cycle, habitat, hygiene</p>
		Enriching Texts - Book Corner	Enriching Texts – Book Corner
	<p>I know some similarities and differences between the natural world around me and contrasting environments, drawing on their experiences and what has been read in class</p>	<p>The Lost Words by Robert Macfarlane and Jackie Morris Where the Forest Meets the Sea by Jeannie Baker Sharing A shell by Julia Donaldson Tadpole's Promise – Jeanne Willis</p> 	<p>Growing Frogs (Life cycle of a frog- fiction) Hodgehog (fiction) by Dick King-Smith The Lorax by Prof Seuss This Moose Belongs to Me by Oliver Jeffers Once There Were Giants by Martin Waddell</p> 

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Year 2 Living Things and their Habitats	 <p>I know some similarities and differences between the natural world around me and contrasting environments, drawing on my experiences and what has been read in class.</p>	<p>I can explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>I can 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.</p> <p>I can identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>I can describe how animals obtain their food from plants and other animals, using the idea of a simple food chain.</p> <p>I can identify and name different sources of food.</p>	
		Key Scientific Vocabulary	
		Living, dead, non-living, habitat, micro habitat, food chain, field, hedgerow, pond, woodland, seashore, ocean, rainforest, arctic, desert, air, food, water, shelter, heat, warmth, sun	
		Enriching Texts – Book Corner	
		<p>Leaf by Sandra Dieckmann Lazy Lion by Mwenye Hadithi RSPB – My First Book of Birds</p>	
Year 1 Everyday Materials Year 2 Uses of Everyday Materials	<p>I understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	Year 1	
		<p>I can distinguish between an object and the material from which it is made.</p> <p>I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p>I can describe the simple physical properties of a variety of everyday materials.</p> <p>I can compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>	
		Key Scientific Vocabulary	
		<p>Wood, plastic, glass, metal, water, rock, brick, paper, card, rubber, fur, fleece, cotton, wool, polyester, cotton wool Names of common objects made from these materials e.g. door, building block, window, pencil sharpener, teddy etc.</p> <p>Soft, hard, rough, smooth, stretchy, stiff, shiny, dull, flexible, waterproof, absorbent, opaque, transparent, translucent</p>	
		Enriching Texts – Book Corner	
		<p>Three Little Pigs Traditional Tale</p> <p>Harry Saves the Ocean by Sylva Fae</p> <p>Plastic/Wood by Abby Colich</p>	
		Year 2	
		<p>I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>	
		Key Scientific Vocabulary	
		<p>Words to describe why certain materials are suitable for particular uses e.g. soft, hard, rough, smooth, stretchy, stiff, shiny, dull, flexible, waterproof, absorbent, opaque, transparent, translucent, squash, bend, twist, stretch</p>	
		Enriching Texts – Book Corner	
		<p>A Planet full of Plastic and How you Can Help by Neil Layton</p> <p>The Great Paper Caper by Oliver Jeffers</p>	

no copyright infringement is intended		EYFS Prior Learning As a scientist:		Year 1 As a scientist:		Year 2 As a scientist:	
Year 1 Seasonal Changes	I can explore the natural world around them, making observations and drawing pictures of animals and plants.	I can observe changes across the 4 seasons. I can observe and describe weather associated with the seasons and how day length varies. I can talk about the changes that occur to trees and plants. I can talk about staying safe in the sun.				Seasonal Changes is outlined in Year 1. However, as a school we see the importance of building on knowledge. Therefore seasonal changes continues as an area of learning throughout as our world witnesses the ongoing effects of global warming linked to our Geography Curriculum.	
	I know some similarities and differences between the natural world around me and contrasting environments, drawing on my experiences and what has been read in class						
		Key Scientific Vocabulary					
		Spring, summer, autumn, winter, day, night, light, dark, sunrise, sunset, sun, rain, snow, hail, precipitation, wind, cloud, cloud cover, leaf, deciduous, evergreen tree, coniferous					
		Enriching Texts – Book Corner					
	I understand some important processes and changes in the natural world around me, including the seasons and changing states of matter.	One Year with Kipper by Mick Inkpen Leaf Man by Lois Ehlert Winter’s Coming by Jan Thornhill A Stroll through the seasons by Kay Barnham Red Sings From Treetops by Joyce Sidman					
