



# St Mary's Catholic Primary School

## Science Curriculum Overview



### Whole School Curriculum Map

	Cycle	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Acorn</b>	A	Knowing Me, Knowing You People who help us People & homes	Diwali, night and day Safety Christmas	Under the Sea Looking after our planet Staying healthy	Climates	Jurassic World Aliens Pirates	Plants and Growth Animal Life Cycles How have I changed?
<b>Blossom</b>	A	Introduction to plants	Seasonal change	Habitats	Life cycles and health	Plant growth	Making connections
	B	Sensitive bodies	Everyday materials	Comparing animals	Uses of everyday materials	Microhabitats	Making connections
<b>Oak</b>	A	Rocks and Soil	Forces & Magnets	States of Matter	Mixtures & Separations	Properties & Changes	Unbalanced Forces
	B	Plants	Classification & Habitats	Animal Life Cycles & Reproduction	Classifying	Evolution	Human Timeline
	C	Space		Movement & Nutrition	Digestion	Circulation and Health	
	D	Light & Shadow	Sound & Vibration	Light and reflection		Electricity	



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### National Curriculum Overview

Development Matters / ELG	Cycle A			
	Knowing Me, Knowing You People who help us	Under the Sea	Looking after our planet Staying healthy	Jurassic World Aliens Pirates Plants and life cycles
Describe what they see, hear and feel whilst outside.	✓		✓	✓
Understand the effect of changing seasons on the natural world around them.	✓		✓	✓
Talk about the differences between materials and changes they notice.	✓		✓	
Recognise some environments that are different to the one in which they live. •	✓		✓	✓
Know and talk about the different factors that support their overall health and wellbeing:	✓		✓	✓
Begin to understand the need to respect and care for the natural environment and all living things.			✓	✓
Understand the effect of changing seasons on the natural world around them.	✓		✓	✓
Make healthy choices about food, drink, activity and toothbrushing.			✓	
Explore the natural world around them	✓		✓	✓
Explore and talk about different forces they can feel				✓
Plant seeds and care for growing plants. •				✓
Understand the key features of the life cycle of a plant and an animal				✓
Begin to understand the need to respect and care for the natural environment and all living things			✓	✓
Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter	✓		✓	✓
Explore the natural world around them, making observations and drawing pictures of animals and plants			✓	✓
Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.			✓	✓

		KS1	Cycle A					Cycle B						
			Introduction to plants	Seasonal change	Habitats	Life cycles and health	Plant growth	Making connections	Sensitive bodies	Everyday materials	Comparing animals	Uses of everyday materials	Microhabitats	Making connections
Biology	Plants	identify and name a variety of common wild and garden plants, including deciduous and evergreen trees	✓				✓							
		identify and describe the basic structure of a variety of common flowering plants, including trees	✓				✓	✓						
		observe and describe how seeds and bulbs grow into mature plants	✓				✓							
		find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	✓				✓	✓						
	Animals, including humans	identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals									✓			✓
		identify and name a variety of common animals that are carnivores, herbivores and omnivores									✓			✓
		describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)									✓			✓
		identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.								✓				✓
		notice that animals, including humans, have offspring which grow into adults					✓			✓				
		find out about and describe the basic needs of animals, including humans, for survival (water, food and air)					✓			✓				
		describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene					✓			✓				
	Living things and their	explore and compare the differences between things that are living, dead, and things that have never been alive			✓									
		identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other			✓			✓					✓	
identify and name a variety of plants and animals in their habitats, including microhabitats				✓			✓					✓		



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	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.			✓	✓									
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<b>Chemistry</b>	<b>Use of Everyday Materials</b>	distinguish between an object and the material from which it is made								✓		✓			
		identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock								✓		✓			
		describe the simple physical properties of a variety of everyday materials								✓		✓			
		compare and group together a variety of everyday materials on the basis of their simple physical properties.								✓		✓			
		identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses											✓		✓
		find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.											✓		✓
<b>Physi</b>	<b>Seasonal changes</b>	observe changes across the four seasons		✓				✓							
		observe and describe weather associated with the seasons and how day length varies.		✓				✓							





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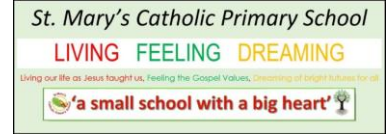
St. Mary's Catholic Primary School  
**LIVING FEELING DREAMING**  
Living our life as Jesus taught us, feeling the Gospel Values, becoming of light children for all  
 'a small school with a big heart'

<b>Biology</b>	<b>Evolution and inheritance</b>	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												✓												
		identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.												✓												
	<b>Animals including humans</b>	<b>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</b>													✓											
		<b>identify that humans and some other animals have skeletons and muscles for support, protection and movement</b>													✓											
		<b>describe the simple functions of the basic parts of the digestive system in humans</b>														✓										
		<b>identify the different types of teeth in humans and their simple functions</b>														✓										
		<b>construct and interpret a variety of food chains, identifying producers, predators and prey</b>									✓						✓									
		<b>describe the changes as humans develop to old age.</b>																✓								
		<b>identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</b>																✓								
		<b>recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</b>																✓								
		<b>describe the ways in which nutrients and water are transported within animals, including humans.</b>																✓								



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		KS2	Cycle A					Cycle B				Cycle C			Cycle D								
			Rocks and soil	Forces and magnets	States of matter	Mixtures and separations	Properties and changes	Unbalanced forces	Plants	Classification and habitats	Animal lifecycles	Classifying	Evolution	Space	Movement and nutrition	Digestion	Circulation and health	Human timeline	Light and shadow	Sound and vibration	Light and reflection	Electricity	
Physics	Light	recognise that they need light in order to see things and that dark is the absence of light																	✓				
		notice that light is reflected from surfaces																		✓			
		recognise that light from the sun can be dangerous and that there are ways to protect their eyes																		✓			
		recognise that shadows are formed when the light from a light source is blocked by an opaque object																		✓			
		find patterns in the way that the size of shadows change.																		✓			
		recognise that light appears to travel in straight lines																				✓	
		use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye																				✓	
		explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes																				✓	
		use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.																				✓	
	Sound	identify how sounds are made, associating some of them with something vibrating																			✓		
		recognise that vibrations from sounds travel through a medium to the ear																			✓		
		find patterns between the pitch of a sound and features of the object that produced it																			✓		











