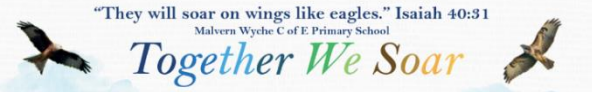




At Malvern Wyche C of E Primary School our curriculum planning consists of termly “Journeys”: cross-curricular projects that teach subjects separately, yet find thematic links between them that are meaningful and memorable, cumulating in an event where we “publish, present or perform”, for a purpose and an audience. Journeys allow Early Years Foundation Stage Early Learning Goals and National Curriculum Programmes of study to be planned in a cohesive, themed cross-curricular way, whilst still ensuring that these individual subjects are planned and taught with depth, breadth and progression. Subject content is taught on a three-year cycle, (Year A, Year B and Year C) with sufficient repetition and revisiting for children to acquire, remember and deepen knowledge and skills. Whatever year group your child is in, the Early Learning Goals or National Curriculum outcomes will be tailored to their age and stage and appropriately challenging.

Malvern Wyche C of E Primary School *Science Curriculum*




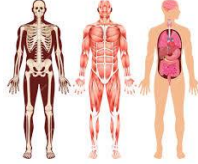









Reception, Year 1 & Year 2

	Autumn Term	Spring Term	Summer Term
Year A (2024-2025)	 <p>My Body and Me (Diet) Children develop a concept of themselves through the lens of science, focussing on health and nutrition as a way to build the concept of body, body parts, senses, requirements for life and body health.</p>	 <p>Botany, home and abroad Pupils will engage with and explore plant life in a rural context, tuning into the natural world first hand here in Malvern & remotely in Tanzania, exploring the world around them and observing, describing, discovering and testing the lives and structures of a range of plants.</p>	 <p>Materials: Buildings and Shelter Pupils will answer the question “What do we use to build with and why? Exploring everyday materials in the context of buildings and structures, looking at their properties and their practical applications (strength, durability and waterproofing) in the context of giving shelter and withstanding damage and relating their exploration and testing to their own lives and experiences.</p>
Year B (2025-2026)	 <p>Nightlife: Nocturnal Animals Pupils will learn about a range and variety of living things, with a focus on nocturnal animals native to the UK, looking closely at owls and their prey, discovering what they all eat and how they live. By exploring the natural world around them and engaging with quality non-fiction and scientific texts they will identify, name, draw and explore a variety of animals and plants; some will be familiar and some they may never have never come across before.</p>	 <p>Materials: Warmth & Style We will answer the question: “What do we make clothes out of and why?” We will examine materials in the context of clothing, fabric and fashion design, looking at the effect of seasonal changes in the natural world around us on how we dress, which materials are used to manufacture clothes and why (weight, durability, waterproofing etc.) considering and testing their properties, uses and applications.</p>	 <p>Life on The Malverns Children will explore our stunning local area, both our rich grounds, immediate surroundings and the focussing on the AONB which is The Malvern Hills, considering this natural resource as both a habitat and an ecosystem and discovering the lifecycles of and relationships between the various living things which inhabit this region. We will observe, name, identify, draw and the plants and animals who share our postcode and learn about their lives, habits and inter-relations.</p>
Year C (2023-2024)	 <p>My Body and Me (Exercise) Children develop a concept of themselves through the lens of science and nature, focussing on health and exercise as a way to build the concept of body, body parts, senses, requirements for life and mental and physical health. They will explore management of personal hygiene and health and discover the needs of animals (with a strong focus on humans) to live, grow, thrive and achieve healthy lifestyles.</p>	 <p>Parks and Gardens – plants in the city. Pupils will engage with and explore plant life in an urban context, tuning into plant life in gardens, allotments and the natural world first hand here in Malvern, exploring the world around them and observing, describing, discovering and testing the lives and structures of a range of plants.</p>	 <p>Tropical Wildlife Pupils will learn about the focus will be on a range and variety of living things, with a focus on diurnal animals not found in the UK, in contrasting environments, living things native to tropical and equatorial world locations, whilst relating this to the natural world around them with opportunities to observe, discover and record. By engaging with quality non-fiction and scientific texts they will identify, name, draw and explore a variety of animals and plants; some familiar and some surprising and new</p>

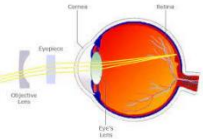

Malvern Wyche C of E Primary School *Science Curriculum Map*



Year 3, Year 4 & Year 5

	Autumn	Spring	Summer
Year A (24-25)	 <p>Earth and Space Pupils will describe the movement of the Earth and of other planets relative to the Sun, describing the lunar cycle to explain day and night and make the connection between the Earth's rotation to the Sun's apparent movement across the sky.</p>	<p>Diet, Muscles and Bones. Pupils will identify that animals - including humans - get nutrition from what they eat, that humans and some other animals have endoskeletons and muscles for support, protection and movement.</p>  <p>Teeth & Eating Pupils will describe the digestive system in humans identifying the different types of teeth in humans and their simple functions. They will create food webs that explain the relationship between all living things and discover who are the producers, predators and prey.</p> 	 <p>States of matter Pupils will compare and group materials together, according to whether they are solids, liquids or gases, observing that some materials change state when they are heated or cooled. They will use a thermometer to make observations as water changes from one state to another and will learn about the water cycle and begin to understand the terms evaporation and condensation.</p>
Year B (25-26)	 <p>Rocks, soils and fossils Pupils will compare and group different kinds of rocks on the basis of their appearance and simple physical properties, describing in simple terms how fossils are formed when things that have lived are trapped within rock. They will recognise that soils are made from rocks and organic matter.</p>	<p>Electricity Pupils will identify common appliances that run on electricity and explore a variety of electrical items, beginning to ask questions, look for similarities and differences and form ideas and theories. Pupils will also learn some basic scientific facts and vocabulary about electricity as an energy source</p> 	 <p>Sound Pupils will identify how sounds are made, associating some of them with something vibrating, and will recognise that vibrations from sounds travel through a medium to the ear. They will find patterns between the pitch of a sound and features of the object that produced it, between the volume of a sound and the strength of the vibrations that produced it and recognise that sounds get fainter as the distance from the sound source increases.</p>  <p>Light Pupils will recognise that they need light in order to see things and that dark is the absence of light. They will notice that light is reflected from surfaces and recognise that light from the sun can be dangerous and that there are ways to protect their eyes. They will discover that shadows are formed when the light from a light source is blocked by an opaque object and will, through experiment and test, find patterns in the way that the size of shadows change.</p>
Year C (23-24)	<p>Plants</p>  <p>Pupils will learn the names of the parts of the flower including the reproductive parts and their function and that plants disperse their seeds in different ways. Plants have requirements for life and they vary from plant to plant. They will be able to investigate how water is transported in plants and will describe a plant's lifecycle, investigating how seeds are dispersed by wind.</p>	 <p>Classification Pupils will learn that there are 7 characteristics of living things and that animals can be grouped into vertebrates or invertebrates and plants into seed producing or non-seed producing. They will know they can expect to find certain animals in my local environment. They will learn how to investigate the animals of our local habitat gathering data, analysing and presenting it and research and observe local vertebrates and invertebrates.</p> <p>Life Cycles Pupils will learn to describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird, and will describe the life process of reproduction in some plants and animals. They will learn to investigate how plants can reproduce asexually and research and sketch mammalian and bird life cycles for comparison.</p> 	 <p>Forces & Magnets Pupils will compare how things move on different surfaces and notice that some forces need contact between two objects, but other forces can act at a distance. They will describe magnets as having two poles and observe how magnets attract or repel each other and attract some materials and compare and group together a variety of everyday materials based on whether they are attracted to a magnet, and identify some magnetic materials.</p>

Year 6

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 4, B & C	<p>Properties and Changes of Materials</p> <p>Pupils will learn about the ways materials mix and combine, based on their properties, understanding that some combinations are reversible and others are not. They will design tests to establish and demonstrate their learning and give reasons for their hypotheses and conclusions, based on their own observations and prior knowledge.</p> <p>This unit develops and deepens the R/1/2 unit “materials: Warmth & Style” and “Materials Building & Shelter” and the 3/4/5 unit “States of Matter”.</p>		<p>Advanced Light</p> <p>Pupils will build on their prior learning about light, recognising that light appears to travel in straight lines and developing an understanding of how objects are seen which they can explain. They will explore and describe shadows and design tests to demonstrate their learning. This unit develops and deepens the 3/4/5 unit “Light”.</p> <p>Advanced Electricity</p> <p>Pupils will build on prior learning in electricity by relating the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit, comparing and giving reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and on/off position of switches and using recognised symbols when representing a simple circuit in a diagram. This unit develops and deepens the 3/4/5 unit “Electricity”.</p>  	 <p>the Earth millions of years ago. They will learn that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents and identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. This unit builds and develops the 3/4/5 unit “Rocks & Soils & Fossils.”</p>	<p>Evolution & Inheritance</p> <p>Pupils will understand how living things have changed over time and that fossils provide information about living things that inhabited</p>	 <p>Heart & Health</p> <p>Pupils will develop an understanding about healthy lifestyles and the relation to internal organs and their function. They will learn to identify and name the main parts of the human circulatory system, describing the functions of the heart, blood vessels and blood and will recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function, describing describe the ways in which nutrients and water are transported within animals, including humans.</p> <p>This unit builds and develops the 3/4/5 units “Teeth & Eating” and “Diet, Muscles and Bones”.</p>	