



ST ANNE'S COPP CHURCH OF ENGLAND PRIMARY SCHOOL, GREAT ECCLESTON



SCIENCE CURRICULUM

In building solid foundations for every unique individual and putting God's love at the centre of all we do, our children learn to embrace our diverse world. We encourage our children to learn universally in order to understand our heritage and roots as a village, town, region and nation. Through strong community links, our children grow in **compassion** and **understanding**, **promote justice** and possess commitment and **aspire** to make a positive difference. We offer an ambitious curriculum that ignites **curiosity** along with high personal expectations that fosters **resilience** and which enables them to flourish. Our children are easily distinguished by the **courage** they show when making brave choices and understand the importance of becoming the very best versions of themselves.

"Let us love, not in word, but in truth and action." (1 John 3:18)

PRE-SCHOOL	Understanding the world
	<p>EYFS Statutory Educational Programme: Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children’s personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children’s vocabulary will support later reading comprehension.</p> <p>These are some of the experiences Reception children may have throughout the year in accordance with the statutory framework:</p> <ul style="list-style-type: none"> ● Using all their senses in hands-on exploration of natural materials. ● Exploring the natural environment outdoors. ● Making collections of natural materials to investigate and talk about and finding similarities and differences. ● Using magnifying glasses and other equipment to encourage them to talk about what they see. ● Talking about what they see using a wide vocabulary. ● Planting seeds and caring for growing plants. ● Understanding the key features of the life cycle of a plant or animal. ● Exploring and talking about differences forces they can feel, i.e. how water pushes up when they push a boat under it, magnetic attraction and repulsion. ● Sinking and floating. ● Shadows and how you can shine light through materials. ● Combining different ingredients, and then cooling or heating (cooking) them.

REC	Understanding the world
	<p>EYFS Statutory Educational Programme: Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children’s personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children’s vocabulary will support later reading comprehension.</p>
	<p>These are some of the experiences Reception children may have throughout the year in accordance with the statutory framework:</p> <ul style="list-style-type: none"> • Outdoor play and exploration • Singing songs and joining in with rhymes and poems about the natural world. • Draw pictures of the natural world, including animals and plants, and beginning to label them. • Observe natural processes such as ice melting, a sound causing vibration, an object casting a shadow and a boat floating on water. • Naming and describing plants and animals they are likely to see in our local area. • Understanding the seasons and weather in their play. • Making observations and recording them.

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Y1	Animals (Other animals: Basic structure)	Everyday Materials (Name objects and materials, describe properties, test properties)	Everyday Materials (Name objects and materials, describe properties, test properties)	Plants (Introducing common names and basic structure & ongoing nature journals)	Animals including humans (Humans: basic structure/body parts & senses)	Plants Theme continued with a block at the end of year as well as throughout year
	Observe plants throughout the year Observe seasonal changes (light and astronomy) throughout the year (including sunlight, weather and link with plants)					
Y2	Living things and their habitats Animals (Animal survival and growth)		Use of everyday materials (Compare and test suitability of materials)	Animals including humans (Humans: Grow and stay healthy)	Plants (Seeds and bulbs, growing plants, keeping them healthy)	
	Observe plants and animals in the local environment throughout the year					
Y3	Light (Light sources, shadows and reflective surfaces)	Health Animals including humans (Health and nutrition)	Plants (Functions of plant parts and variables affecting growth)	Animals including humans (Skeletons and movement)	Forces and magnets (Investigating objects moving on different surfaces and magnetic forces)	Rocks (Categorising and testing material properties)
Y4	Living things and their habitats (Biodiversity, classification and simple keys, care of environments – local and global)	Animals including humans (Teeth and digestive system)	Electricity (Constructing simple circuits, making and using switches, conductors and insulators)	Sound (Exploring vibrations and pitch)	Material properties and material changes (States of matter – solid, liquid, gas; water cycle)	
	Use the local environment throughout the year to identify, study and observe changes of plants and animals in their habitat					
Y5	Living things and their habitats (Life cycles and reproduction in animals and plants)	Forces (Gravity, friction and air resistance and mechanisms)	Earth and Space (Light and astronomy)	Properties and changes of materials (Material properties: thermal insulation and testing material properties)	Properties and changes of materials (Material changes: reversible changes)	Properties and changes of materials (Material changes: irreversible changes)
	Observe life cycles of plants and animals in the local environment throughout the year. Animals including humans (Yr 5 life cycles) teach through PSHE lessons					
Y6	Light Light and astronomy (Light travels in straight lines, how we see, how shadows are created)	Evolution and inheritance (Including adaptations)	Animals including humans (Circulatory system and effects of exercise on the body, keeping healthy, diet and lifestyle)	Living things and their habitats (More complex classification system)	Electricity (Symbols for circuit components, changing components of a circuit to investigate the effect)	