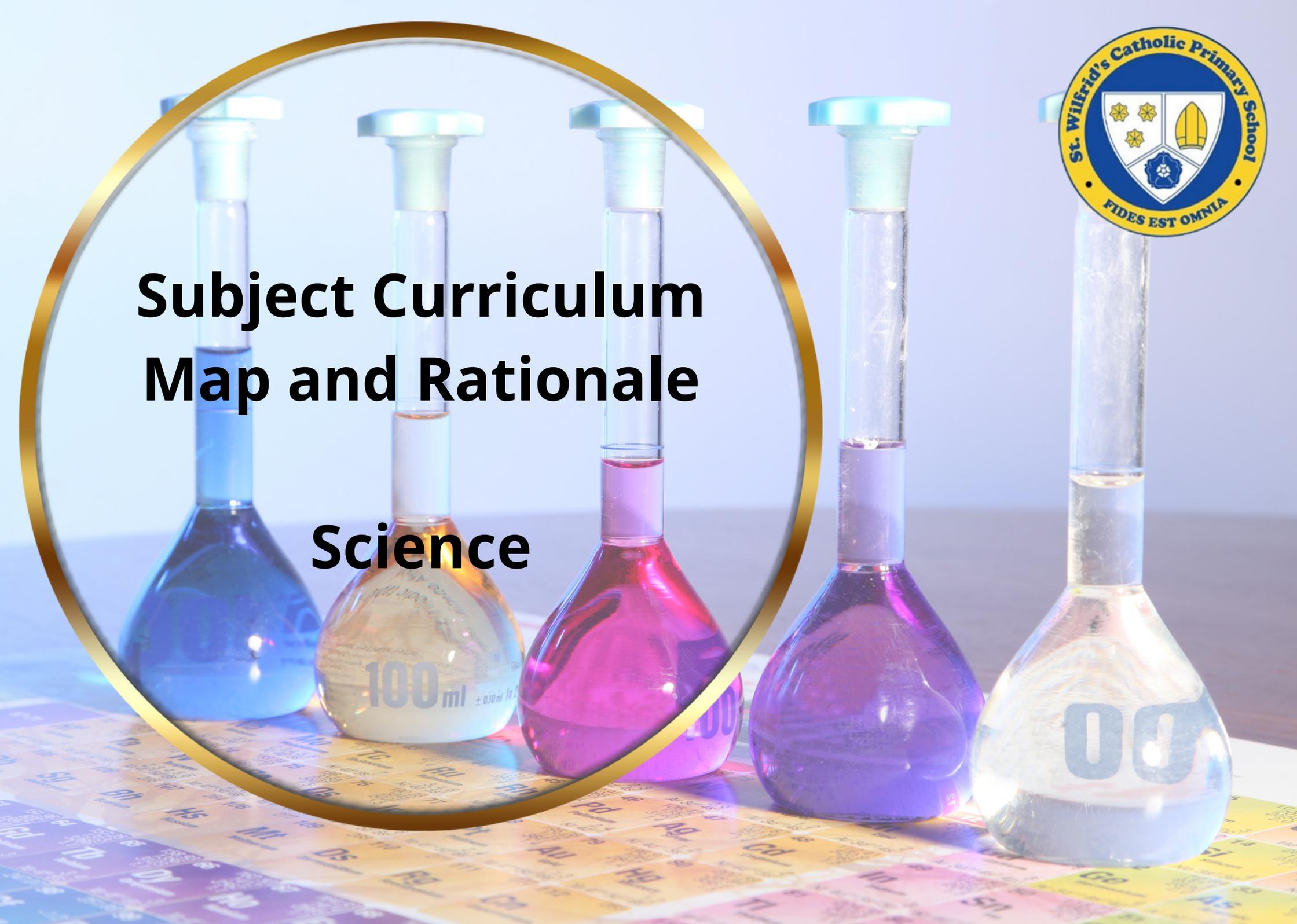




# Subject Curriculum Map and Rationale

## Science



# Science in the Early Years Foundation Stage

EYFS	Development Matters 3&4 Years will learn to:	Development Matters Children in Reception will learn to:	Statutory Framework Early Learning Goals
<p><b>Understanding the world</b></p>	<p>Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties. Begin to make sense of their own life-story and family's history. Explore how things work. 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. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice.</p>	<p>Explore the natural world around them. Describe what they see, hear and feel whilst outside. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them.</p>	<p>The Natural World 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. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>
<p><b>Communication and Language</b></p>	<p>Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"</p>	<p>Learn new vocabulary. Ask questions to find out more and to check what has been said to them Use talk to work out problems and organise thinking and activities. Explain how things work and why they might happen. Use new vocabulary in different contexts</p>	<p>Make comments about what they have heard and ask questions to clarify their understanding.</p>

# Science in the Early Years Foundation Stage

EYFS	Development Matters 3&4 Years will learn to:	Development Matters Children in Reception will learn to:	Statutory Framework Early Learning Goals
<p><b>PSED</b></p>	<p>Make healthy choices about food, drink, activity and toothbrushing.</p>	<p>Know and talk about the different factors that support their overall health and wellbeing: regular physical activity, healthy eating, toothbrushing, sensible amounts of 'screen time', having a good sleep routine, being a safe pedestrian</p>	<p>PSED - Managing Self Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.</p>
<p><b>Topics</b></p>	<p><b>AUTUMN</b></p> <p>There's nobody else quite like me! (Nursery)</p> <p>Ourselves - me (Reception)</p>	<p><b>SPRING</b></p> <p>Cold, cold, cold! (Nursery)</p> <p>Far far away (Reception)</p>	<p><b>SUMMER</b></p> <p>Growing and Changing (Nursery)</p> <p>In the Garden (Reception)</p>

# Science Curriculum Map

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Year 1</b>	Animals Including Humans Using Our Senses - Everyday Materials		Plant Detectives		Every Day Materials	
<b>Year 2</b>	Living things and their Habitats What is in your Habitat		Animals Including Humans Taking Care and Growing up	The Apprentice Gardener	Every Day Uses of Materials Good choices - Shaping Up	
<b>Year 3</b>	Rock Detectives	Can you see me?	Amazing Bodies	How does your Garden Grow?	The Power of Forces	Our Changing World
<b>Year 4</b>	Switched On!	Our Changing World	In a State	Sound	Who am I?	Where does all that food go?
<b>Year 5</b>	Circle of Life	Reproduction in Plants and Animals	Feel the Force!	Everyday Materials		The earth and Beyond
<b>Year 6</b>	Body Pump	The Nature Library	Everything Changes	Danger! LOW VOLTAGE!	Light Up Your World!	

# Science Rationale

Our curriculum is knowledge rich and coherently sequence, developed using Snap Science combined with subject leader expertise to ensure the best possible curriculum to meet the needs of all of our pupils.

Pupils will be taught units of work that cover the requirements of the National Curriculum in the specific disciplines of biology, chemistry and physics. Pupils will encounter people who have made significant contributions to the field of science over time, understanding that science has been a quest for understanding for many years, and will continue to be so in the future.

Pupils will build a body of key foundational science knowledge as they work through the curriculum, asking questions and developing a sense of curiosity about the world around us.

Over time their knowledge will deepen moving from recognising and naming parts of the human body to understanding how our muscles work, how our blood moves around our body and how our nervous system helps us to interact with the world.

Pupils will be encouraged to use the knowledge they learn in Science and apply it to investigations that test a theory or set out to answer a question. Importantly, substantive scientific knowledge is taught first, before pupils are asked to undertake enquiry. This helps them to fully understand the elements of the enquiry first, and to make informed observations about the processes they see. Gathering information, recording data, graphing data and interpreting findings are all essential skills that pupils will apply to new contexts as they work through the curriculum. Enquiries include observing over time, pattern seeking, identifying, classifying and grouping, comparative and fair testing and researching using secondary sources.

