

Intent:

What do we want children to learn?

At South Marston, we recognise the importance of science in every aspect of daily life. As one of the core subjects taught in primary schools, we give the teaching and learning of science the prominence it requires. Our aim is to equip our children with the working scientific skills, knowledge and vocabulary so they can understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes, resulting in an understanding of the world.

The National Curriculum shapes our Science curriculum for Science, our school curriculum, our school values and the ethos at South Marston. Our science curriculum aims to ensure that all children:

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them
- Are equipped with the **scientific skills** required to understand the **uses and implications** of science, today and for the future.

We aim to ensure every child enjoys science which results in motivated learners with sound scientific understanding.

Our Science Blueprint



What Science looks like at South Marston CofE Primary School?

Our Medium Term Planning each term is based on National Curriculum Statements and use of our teaching backwards approach to ensure consideration of progression in each science topic across the school. Knowledge organisers are present for each topic in all year groups for children to refer to throughout learning. Children show the expected knowledge and skills required in each session and can discuss these. Sessions will include learning about a range of scientific theories, investigations and enquiry skills they can use to understand the world around them.

Implementation:

How do we do it at South Marston CofE Primary School?

Science is taught in planned and consistent topic blocks, to enable the achievement of a greater depth of knowledge. Our teaching sequences build upon the learning and skill development of previous years. A wide variety of teaching approaches will be used in science lessons to ensure children make good progress, show **perseverance** and all individual needs will be catered for. Through our planning, we involve problem solving opportunities that allow children to find out for themselves. Children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers.

Working Scientifically skills are embedded into lessons to ensure these skills are being developed throughout the children's primary experience and new vocabulary and challenging concepts are introduced through direct teaching. These challenging concepts and new vocabulary will be revisited through the use of knowledge organisers. **Enquiry** and Working scientifically skills will be displayed in all classrooms and through recognition of these, children's scientific vocabulary and explanations will allow discussions to delve deeper into the concepts. Practical resources will be used where possible, to enhance scientific enquiry. Pupils will be provided with opportunities to interpret their observations, results and conclusions; communicating their scientific knowledge and understanding appropriately, before evaluating their learning.

Impact:

On leaving South Marston CofE Primary School children will:

Children will have developed an enjoyment and a sense to enquire deeper into all areas of Science. They will have a positive attitude and resilience towards enquiry, investigation and evaluation within Science. They will be tolerant, **collaborative** learners who **persevere** and are ready to take their learning into the **community** and apply their scientific understanding to the world around them, seeking a better future through **sustainability**. Children will learn the possibilities for careers in science, providing the children with **hope** and all children will feel they are scientists and are capable of **flourishing**. They will show secure knowledge and ability to recall essential information and skills covered across their time at South Marston, based on the Science coverage within the National Curriculum.