



SCIENCE Intent, Implementation and Impact Newton Bluecoat C. of E. Primary School

<u>Intent</u>	<u>Implementation</u>	<u>Impact</u>
<p>The 2014 National Curriculum for Science 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 understand that it is important for lessons to have a skills-based focus, and that the knowledge can be taught through this</p> <p>At Newton Bluecoat, we encourage children to be inquisitive throughout</p>	<p>Teachers create a positive attitude to science learning within their classrooms and reinforce an expectation that all pupils are capable of achieving high standards in science. Our whole school approach to the teaching and learning of science involves the following;</p> <ul style="list-style-type: none">• Science is taught in planned topic blocks by the class teachers.• Through our planning, where teachers create engaging lessons, we involve problem solving opportunities that allow children to apply their knowledge, and find out answers for themselves.• The children are encouraged to ask their own questions and be given opportunities to use their scientific skills and research to discover the answers.• Teachers use precise questioning in class to test conceptual	<ul style="list-style-type: none">• The successful approach at Newton Bluecoat results in a fun, engaging, high-quality science education, that provides children with the foundations and knowledge for understanding the world.• Our engagement with the local environment ensures that children learn through varied and first hand experiences of the world around them.• All children are given the opportunity to be scientists and they are all capable of achieving.• Children at Newton Bluecoat thoroughly enjoy science and this results in motivated learners with sound scientific understanding.



SCIENCE Intent, Implementation and Impact Newton Bluecoat C. of E. Primary School

their time at our school and beyond. The Science curriculum fosters a healthy curiosity in children about our universe and promotes respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Throughout the programmes of study, the children will acquire and develop the key knowledge that has been identified within each unit and across each year group, as well as the application of scientific skills. We ensure that the Working Scientifically skills are built-on and developed throughout children's time at the school so that they can apply their knowledge of science when using equipment, conducting investigations, building arguments and explaining concepts confidently and continue to ask questions and be curious about the world around them.

knowledge and skills, and we assess pupils regularly.

- Tasks are selected and designed to provide appropriate challenge to **all** learners
- We build upon the knowledge and skill development of the previous years.
- As the children's knowledge and understanding increases, they are more proficient in selecting, using scientific equipment, collating and interpreting results, they become increasingly confident in their growing ability to come to conclusions based on real evidence.
- Working Scientifically skills are embedded into lessons to ensure that skills are systematically developed throughout the children's school life and scientific vocabulary and challenging concepts are introduced through direct teaching.
- Teachers demonstrate how to use scientific equipment, and the



SCIENCE Intent, Implementation and Impact **Newton Bluecoat C. of E. Primary School**



	<p>various Working Scientifically skills in order to embed scientific understanding. Teachers find opportunities to develop children's understanding of their surroundings by accessing outdoor learning and workshops with experts.</p> <ul style="list-style-type: none">• At the end of each topic, key knowledge is reviewed by the children and rigorously checked by the teacher and consolidated as necessary.	
--	---	--