



SCIENCE

Intent – To ensure that all pupils are provided with opportunities to understand and develop curiosity about the world around them. Science has changed our lives and is vital to the world’s future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science.

Implementation: In Science at Cardinal Newman School we embed our intent in our pupils learning journey by:

- developing an enquiring mind and a scientific approach to problem solving
- encouraging positive attitudes to Science, eg, curiosity, cooperation, perseverance, independence in thinking and critical evaluation of evidence
- developing a secure understanding of basic scientific concepts
- learning to communicate ideas clearly and using scientific language with confidence and understanding
- through first-hand experience, developing the practical skills and logical thought processes associated with scientific investigation, including forming questions, observing, measuring and recording data, predicting outcomes and explaining results
- developing a concern for the environment and an understanding of how we can help protect it
- raising awareness of the importance of Science in our present technological age

Life Skills:

to develop lifelong learning powers and competent Scientists	<ul style="list-style-type: none"> • Providing a strong foundation for understanding and navigating the wider world. • Solid substantive and disciplinary knowledge – progressively built upon - which is ready to be applied at Secondary School and beyond. • Introducing our pupils to the essential knowledge pupils need to be educated citizens - to the best that has been thought and said - and helping to engender an appreciation of human creativity and achievement (Cultural Capital). The work of scientists such as Isaac Newton, Mary Anning, Charles Darwin, Alexander Fleming and John Kemp Starley is explored.
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Opportunities for Learning:

success and challenge within and beyond the curriculum to achieve our full potential	<ul style="list-style-type: none"> • Planning a progressive, whole school curriculum that provides small steps and opportunities for challenge within each lesson to further develop skills. • Applying mathematical knowledge in Science. • Providing opportunities for outdoor learning within the local area and the wildlife garden. • Collaborating with peers and other schools to provide challenge. • Providing extracurricular clubs (engineering/science) to build on scientific knowledge and a sense of enjoyment and curiosity about the subject. • SEN/lower achieving children are given support to access the curriculum in the form of differentiated tasks, vocabulary lists and some pre-teaching.
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Values

guided by the Gospels to develop caring respectful relationships	<ul style="list-style-type: none"> • giving opportunities to develop team work and supportive atmospheres in classrooms • providing inclusive opportunities for all children
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Experience of serving others:

within and beyond the school community.	<ul style="list-style-type: none"> • Opportunities to support and appreciate the skills of others within the school community (fundraising, school events)
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