Curriculum Core Subjects

English

The overarching aim for English in the national curriculum is to promote high standards of language and literacy by equipping pupils with a strong command of the spoken and written word, and to develop their love of literature through widespread reading for enjoyment. The national curriculum for English aims to ensure that all pupils:

* read easily, fluently and with good understanding
* develop the habit of reading widely and often, for both pleasure and information
* acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language
* appreciate our rich and varied literary heritage
* write clearly, accurately and coherently, adapting their language and style in and for a range of contexts, purposes and audiences
* use discussion in order to learn; they should be able to elaborate and explain clearly their understanding and ideas
* are competent in the arts of speaking and listening, making formal presentations, demonstrating to others and participating in debate.

Mathematics

The national curriculum for mathematics aims to ensure that all pupils:

* become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
* **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
* can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Science

The national curriculum for science aims to ensure that all pupils:

* 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 knowledge required to understand the **uses and implications** of science, today and for the future.

Computing

The national curriculum for computing aims to ensure that all pupils:

* can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
* can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
* can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
* are responsible, competent, confident and creative users of information and communication technology



