

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. Our high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Mathematics is an interconnected subject in which pupils learn to be able to move fluently between representations of mathematical ideas. The programme of study for key stage 3 is sequenced into, what may appear to be, distinct domains, but pupils build on key stage 2 and connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

Each area of study in mathematics is connected to the others and we retrieve, affirm and build the knowledge and understanding as we progress through the curriculum. For example when learning about and how to apply Pythagoras' theorem in year 9 we need previous teaching from Number with an understanding of square numbers and square roots, from Algebra with the application of substitution and rearranging equations and from Geometry in the knowledge of the properties of shapes and specifically triangles.

Pupils also learn to apply their mathematical knowledge in science, geography, computing and other subjects.