

# Mathematics

## Course Outline

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Mathematics will build on and progress from the levels of achievement at the end of Key Stage 3, and extend this to aspects of mathematics needed for progression to scientific, technical or further mathematical study.

It will enable you to appreciate the coherence, creativity, elegance and power of mathematics. It will prepare students to make informed decisions about further learning opportunities and career choices.

The course will have an emphasis on those aspects of mathematics required for progression into mathematics or mathematically-related disciplines or employment routes. It will feature problems set both in real-world contexts and within mathematics itself and will encourage learners to employ and evaluate different mathematical techniques.

## What will I study?

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The Mathematics course will enable you to:

- Develop knowledge, skills and understanding of mathematical methods, techniques and concepts required for progression into mathematics or mathematically-related disciplines or employment routes
- Make connections between different areas of mathematics
- Select and apply mathematical methods in both mathematical and real-world contexts
- Reason mathematically, construct arguments and simple proofs, and make logical deductions and inferences
- Develop and refine strategies for solving a range of mathematical and real-world problems
- Communicate mathematical information in a variety of forms
- Interpret mathematical results and draw and justify conclusions that are relevant to the context
- Communicate mathematical information in a variety of forms.

