



# Year 10 Maths



What have students at St. Crispin's been taught to understand and be able to do?

## Core Knowledge

Students are taught using the Oxford University Press AQA GCSE Maths Foundation or Higher tier textbooks.

Sequencing of learning follows a mastery approach ensuring topics that link well are taught together. Ensuring students have mastered key concepts before moving on. The exact order of the work is detailed in the scheme of work at the bottom of this document.

### Year 10 content Foundation:

**Number** – place value, calculations, fractions, decimals, percentages, estimation, calculator use, factors, multiples, prime, roots, indices

**Ratio and proportion** – ratio, proportion, direct and inverse proportion, percentage change

**Data handling** – statistical diagrams and representations, averages

**Geometry** – angles, angles in polygons, similarity and congruency, perimeter, area, circles, loci, constructions,

**Algebra**- expressions, simplifying, indices, factorising, substitution, formulae, identities, solving linear equations, quadratic equations, sequences.

### Higher:

**Number** – place value, calculations, fractions, decimals, percentages, estimation, calculator use, factors, multiples, prime, roots, indices

**Geometry**- angles, angles in polygons, similarity and congruency, perimeter, area, circles, loci, constructions,

## Core Skills

Students in Year 10 follow the first year of a two-year GCSE scheme of work. In Year 10 students cover the first section of content from the topic areas; number, ratio and proportion, data handling, probability, geometry and algebra.

Core skills students will develop are to:

Be able to reason mathematically  
To be able to follow mathematical

processes but also apply knowledge from across the curriculum and make connections between their learning

To apply taught skills to solve functional real-world mathematical problems  
To develop revision and exam techniques to prepare them for the formal GCSE assessments.

Students are pushed to develop their fluency in mathematics by having a large focus of every lesson on developing student's numeracy skills in every unit of work.

Students are also given regular feedback and teacher modelling to encourage students to be able to write meticulous, detailed, and mathematically correct solutions so that students are able to communicate mathematically.



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**Ratio and proportion** – ratio, direct and inverse proportion, percentage change

**Data handling** – statistical diagrams and representations, averages

**Algebra**- expressions, simplifying, indices, factorising, substitution, algebraic fractions, formulae, identities, solving linear equations, quadratic equations, equivalences, sequences.

Our Foundation Scheme of work can be found [here](#).

Our Higher scheme of work can be found [here](#).



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## How has learning been assessed?

Students take end of chapter tests throughout the year where areas of weakness are identified and intervention with specialist intervention teachers organised.

Students also sit a formal summative end of Year 10, based on chapters 1-10, assessment in the hall at the end of the academic year to provide setting data for GCSE.

## What is coming up in the following year?

In Year 11 students finish receiving quality first teaching of the final section of content and then start a series of revision lessons of key material from the GCSE course in preparation for the exam.



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