



St Gregory the Great Catholic School – Secondary Phase

Maths (KS4)

Examination Board: Edexcel GCSE Maths: [Specification](#)

Course Description:

KS4 Maths starts in Year 9 at St Greg's. The course is split in to two tiers, Higher and Foundation. Students studying the Higher tier can achieve grades 4-9, and students on foundation can achieve 1-5. The course is divided in to six broad topics, and these topics are allocated different amounts of marks between the tiers. A summary of what is covered is listed below, with a link to the relevant BBC Bitesize website. Note: not all Foundation sub-topics appear on the Hier tier, and vice versa.

- **[Number](#)**: Fractions, decimals, percentages, laws of indices, standard form, surds.
- **[Algebra](#)**: Notation, vocabulary, algebraic fractions, proofs, manipulation, substitution, formulae and expressions.
- **[Ratio, proportion and rates of change](#)**: Convert between standard units, scale factors, compound units, percentage increase and decrease.
- **[Geometry and Measure](#)**: Angles, lines, polygons, loci and constructions, 2D and 3D shapes, circle theorems, transformations, Pythagoras' Theorem, Trigonometry, Vectors.
- **[Probability](#)**: Vocabulary, Venn diagrams, frequency trees, conditional and unconditional probability.
- **[Statistics](#)**: Box plots, data interpretation, mean, median, mode, range, scatter graphs, histograms, pie charts.

Assessment:

Both tiers are assessed through three exam papers, each of which is worth $\frac{1}{3}$ of the marks for the GCSE. Each exam is 1 $\frac{1}{2}$ hours long. All exams assess the full range of skills learnt throughout the course and can cover all topics. Paper 1 is a non-calculator paper. Papers 2 and 3 require a calculator. For all exams, students should have a black pen, pencil, ruler, protractor, compass and eraser.

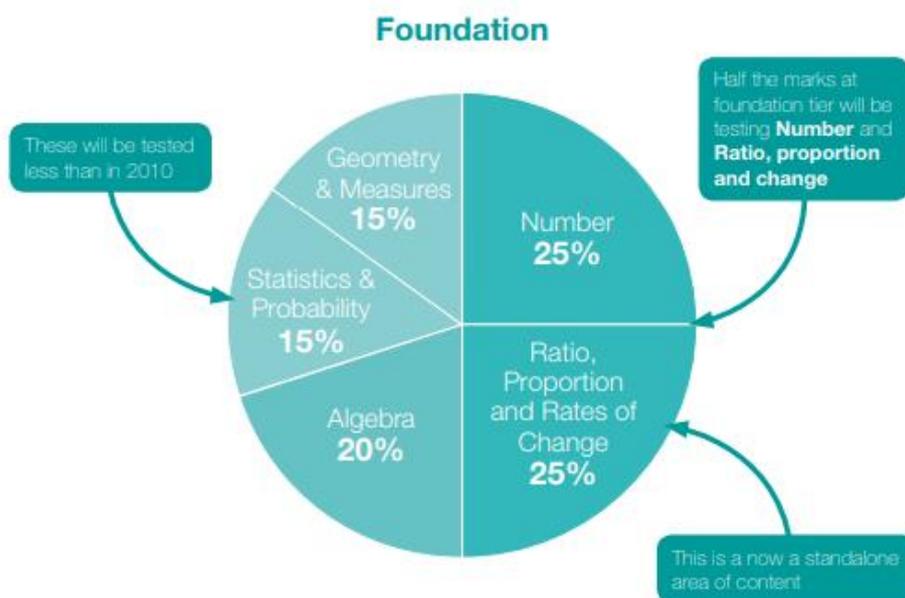
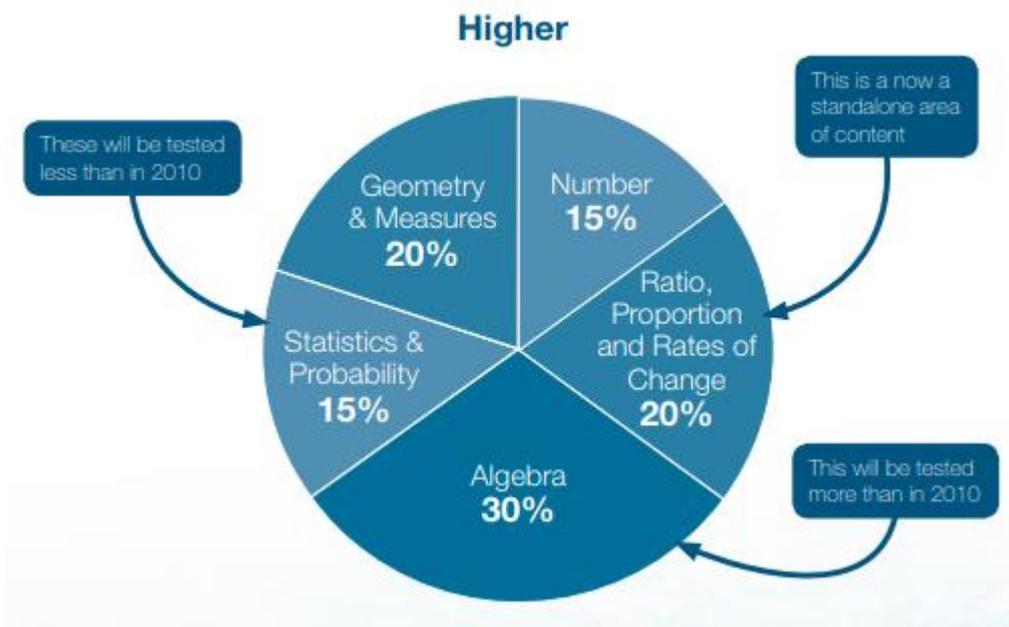
Exam Dates:

Paper 1: 21/5/19

Paper 2: 6/6/19

Paper 3: 11/6/19

Marks for Higher and Foundation are distributed in the following ways:



The Importance of Arithmetic

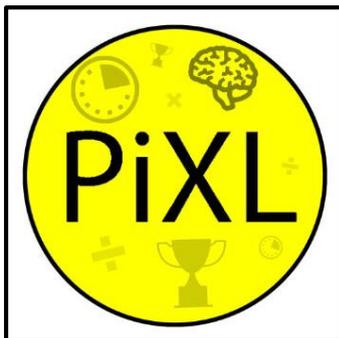
Every year students across the country lose 25% of marks available through poor arithmetic. This is true as for students chasing a grade 9 or a grade 4. Two easy ways to improve your arithmetic skills come from PiXL:

Use the **PiXL Maths App** (click on “Set Tasks” then “Arithmetic Challenge”) to check you have all the skills required to access all questions. This is recommended for ALL students.



mathsapp.pixl.org.uk

Use the **PiXL Times Tables App** to improve your use of times tables in mental arithmetic. This helps speed up how quickly you can answer a question, and therefore allows you to complete more of the paper.



Visit: timestable.pixl.org.uk/Timestables.html

Both apps available on iPhone, Android, tablet and desktop. They record everything you do, allowing you to see your progress over time. Short regular sessions are recommended!

Further information on GCSE Maths, and for PiXL App Logins, contact Mr Holton - Head of Maths