

## Mathematics Faculty

Curriculum for KS3 and KS4

## Mathematics Curriculum Intent

Our mathematics curriculum builds the mathematical skills, knowledge and understanding that students require to be successful both in GCSE and in life beyond school. Through high quality teaching and resources, students will acquire, and then be able to select and apply relevant mathematical techniques to a range of problems (both mathematical and within a real context).

In KS4, the topics follow the sequence set out by the exam board, Edexcel. Topics are regularly revisited and built upon through the weekly skills review, homework papers and bell tasks.

Using strong assessment practices, the curriculum provides the flexibility to adjust to students' weaknesses in key areas. This is backed up by a history of success in examinations.

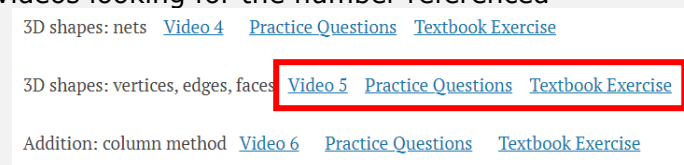
## How To Help At Home

For each of the curriculum areas described in the following pages, links are available to resources that you may like to use to help your child at home. The links provided for each half term will support with topics taught in the **previous** half term.

Each link refers to a support video in the free website [www.corbettmaths.com](http://www.corbettmaths.com). To access these, choose the 'Videos' link from the home page:



Scroll through the list of videos looking for the number referenced



We would then suggest watching the **video** before moving on to either of the two exercises linked on the right of the video. Answers are available for most questions and assessment should form an important part of any home study.



*Year Seven*

Unit	Topic	Term
1	Place Value	Autumn 1
2	Introduction to Shape	Autumn 1
3	Introduction to Algebra	Autumn 2
4	Calculation	Autumn 2
5	Using Averages	Spring 1
6	Working with Fractions	Spring 2
7	Expanding	Summer 1
8	Units	Summer 1
9	Charts	Summer 2

*Year Eight*

Unit	Topic	Term
8	<i>Units</i>	Autumn 1
9	<i>Charts</i>	Autumn 1
10	Multiples and Factors	Autumn 2
11	Factorising	Autumn 2
12	Introduction to Angles	Autumn 2
13	I've Got The Power!	Spring 1
14	Ratio	Spring 2
15	Using Formulae	Spring 1
16	Perimeter and Area	Summer 1
17	Fractions, Percentages, Decimals	Summer 1
18	Probability	Summer 2

Please note the timing for the new curriculum in year eight varies by class, all students will however see the topics in the order above.



### Years 9 – Bridging Year

Students are assessed at the end of year 9 with an internally set and assessed exam. The exam consists of three ninety minute papers, the first of which is non-calculator. The results will be used to help judge tier setting for year ten.

Unit	Topic	Year	Term
B01	Integers and Place Value	9	Autumn 1
B02	Decimal Numbers	9	Autumn 1
B03	Multiples, Indices, Powers & Roots	9	Autumn 1
B04	Factors and Primes	9	Autumn 2
B05	Algebra: The Basics	9	Autumn 2
B06	Using Tables to Represent Data	9	Spring 1
B07	Charts and Graphs	9	Spring 1
B08	Fractions	9	Spring 2
B09	Percentages	9	Spring 2
B10	Equations and Inequalities	9	Summer 1
B11	Sequences	9	Summer 1

### Key Resources

We strongly recommend the use of [www.corbettmaths.com](http://www.corbettmaths.com), there are many other free maths revision websites: [www.justmaths.co.uk](http://www.justmaths.co.uk), [www.onmaths.com](http://www.onmaths.com) and [www.mathsgenie.co.uk](http://www.mathsgenie.co.uk)



*Years 10 - 11 (Foundation Tier)*

Students are assessed at the end of year 11 with an externally set and assessed exam. The exam consists of three ninety minute papers, the first of which is non-calculator.

Unit	Topic	Year	Term
F12	Ratio and Proportion	10	Autumn 1
F13	Shapes, Lines and Angles	10	Autumn 1
F14	Polygons and their Angles	10	Autumn 2
F15	Sampling and Averages	10	Autumn 2
F16	Perimeter, Area and Volume	10	Spring 1
F17	Graphs	10	Spring 1
F18	Transformations	10	Spring 2
F19	Right Angled Triangles	10	Spring 2
F20	Probability	10	Summer 1
F21	Multiplicative Reasoning	10	Summer 1
F22	Drawing	10	Summer 2
F23	Equations and Graphs	11	Summer 2
F24	Circles, Cylinders, Cones & Spheres	11	Autumn 1
F25	Similar Shapes and Vectors	11	Autumn 1
F26	Indices, Standard Form & Algebra	11	Autumn 1

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*Years 10 - 11 (Higher Tier)*

Students are assessed at the end of year 11 with an externally set and assessed exam. The exam consists of three ninety minute papers, the first of which is non-calculator.

Unit	Topic	Year	Term
H12	Ratio and Proportion	10	Autumn 1
H13	Shapes, Lines and Angles	10	Autumn 1
H14	Polygons and their Angles	10	Autumn 2
H15	Making Comparisons	10	Autumn 2
H16	Right Angled Triangles	10	Autumn 2
H17	Graphs	10	Spring 1
H18	Perimeter, Area & Volume	10	Spring 1
H19	Transformations	10	Spring 1
H20	Drawing	10	Spring 2
H21	Trickier Equations	10	Spring 2
H22	Probability	10	Summer 1
H23	Multiplicative Reasoning	10	Summer 2
H24	Similarity and Congruence	11	Autumn 1
H25	More Trigonometry	11	Autumn 1
H26	More Charts	11	Autumn 1
H27	More Graphs	11	Autumn 2
H28	Circle Theorems	11	Autumn 2
H29	Vectors and Geometric Proof	11	Autumn 2
H30	Everything Else!	11	Autumn 2

*Key Resources*

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