

GCSE Mathematics 2023-24

Edexcel 1MA1

The Corsham School

π

An overview of Mathematics GCSE

- The assessments will cover the following content headings:
 - 1 Number
 - 2 Algebra
 - 3 Ratio, proportion and rates of change
 - 4 Geometry and measures
 - 5 Probability
 - 6 Statistics
- Two tiers are available: Foundation and Higher (content is defined for each tier).

An overview of Mathematics GCSE

- The qualification consists of three equally-weighted written examination papers at either Foundation tier or Higher tier.
- All three papers must be at the same tier of entry and must be completed in the same assessment series.
- Paper 1 is a non-calculator assessment and a calculator is allowed for Paper 2 and Paper 3.
- Each paper is 1 hour and 30 minutes long.
- Each paper has 80 marks.

An overview of Mathematics GCSE

- Foundation tier: grades 1 to 5.
- Higher tier: grades 4 to 9 (grade 3 allowed).

Tier	Topic area	Weighting
Foundation	Number	22 - 28%
	Algebra	17 - 23%
	Ratio, Proportion and Rates of change	22 - 28%
	Geometry and Measures	12 - 18%
	Statistics & Probability	12 - 18%
Higher	Number	12 - 18%
	Algebra	27 - 33%
	Ratio, Proportion and Rates of change	17 - 23%
	Geometry and Measures	17 - 23%
	Statistics & Probability	12 - 18%



GCSE Scheme of Work

Year	Term	Topic
Year 10	Term 1 & 2	Congruence, similarity and Enlargement
	Term 3 & 4	Angles
	Term 5 & 6	Collecting, representing and interpreting data
Year 11	Term 1 & 2	Gradients and Lines
	Term 3 & 4	Multiplicative Reasoning
	Term 5 & 6	Revision

Year	Term	Topic
Year 10	Term 1 & 2	Trigonometry
	Term 3 & 4	Working with Circles
	Term 5 & 6	Vectors
Year 11	Term 1 & 2	Using Graphs
	Term 3 & 4	Algebraic Resoning
	Term 5 & 6	Exams

Year	Term	Topic
Year 10	Term 1 & 2	Representing solutions of equations and inequalities
	Term 3 & 4	Ratio and Fractions
	Term 5 & 6	Non - Calculator Methods
Year 11	Term 1 & 2	Expanding and Factorising
	Term 3 & 4	Transforming and Constructing
	Term 5 & 6	Exams

Year	Term	Topic
Year 10	Term 1 & 2	Simultaneous Equations
	Term 3 & 4	Percentages and Interest
	Term 5 & 6	Types of Number and Sequences
Year 11	Term 1 & 2	Changing the Subject
	Term 3 & 4	Listing and Describing
	Term 5 & 6	Exams

Year	Term	Topic
Year 10	Term 1 & 2	Probability
	Term 3 & 4	Indices and Roots
	Term 5 & 6	Exams
Year 11	Term 1 & 2	Functions
	Term 3 & 4	Show that...
	Term 5 & 6	Exams

Year 11 timeline, resources and independent learning

- › **Timeline – September to GCSE**
 - PPEs, Feedback
- › **Resources, websites and learning opportunities**
 - Revision, Homework, Individual learning
- › **Exam Preparation**
 - Master classes, Drop ins, Practice Papers

AQA Further Maths level 2 qualification

Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
--------	--------	--------	--------	--------	--------	--------	--------	--------

AQA Further Maths level 2 Qualification started in September 2023 for 20 selected, higher level students. The course is only suitable for students who are on course to achieve a grade 7, 8 or 9 in GCSE Maths.

Preparation for December PPE

Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
--------	--------	--------	--------	--------	--------	--------	--------	--------

Students will be using a variety of resources as they start to prepare for their December PPE.

After school drop-in sessions are running on

Tuesday 3-4pm – Foundation

Thursday 3-4pm - Higher

Preparing for December Mock Exams (PPE)

Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
--------	--------	--------	--------	--------	--------	--------	--------	--------

Students will sit three, one hour exams for their maths PPE.

Paper 1 – non-calculator

Papers 2 and 3 – calculator

In preparation for these all students will be given three practice papers to complete at home – completing these well is the best way to prepare for exams.

Post exam analysis and targeted intervention

Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
--------	--------	--------	--------	--------	--------	--------	--------	--------

Question Level Analysis (QLA) data sheets will be produced for each student. This means that in addition for an overall mark and grade, every student will receive a personalised feedback sheet for each paper linked to Sparx for individual learning.

The faculty will analyse all data which may result in some set changes if any students need to change level of entry.

New intervention groups will be drawn up and students will have the opportunity to work on areas of weakness highlighted.



QLA Data Sheet

sparx

Questions	Topic	Score	Sparx Code
1	Converting between fractions, decimals and percentages	1 / 1	U888
2	Finding fractions of shapes	1 / 1	U679
3	Understanding and ordering decimals	1 / 1	U435
4	Adding and subtracting with negative numbers	0 / 1	U742
5	Solving equations with one step	1 / 1	U755
6	Identifying parts of circles	1 / 1	U767
7	Finding factors and using divisibility tests	1 / 2	U211
8a	Angles on a line and about a point	2 / 2	U390
8b	Understanding, measuring and drawing angles	1 / 1	U447
9a	Reading and plotting coordinates	0 / 1	U789
9b	Reading and plotting coordinates	0 / 1	U789
9c	Calculating midpoints	1 / 1	U933
9d	Plotting horizontal and vertical lines	0 / 1	M797
10	Use a written method to multiply decimals, Solve direct proportion word problems	3 / 4	U293, U721
11a	Adding and subtracting with integers	2 / 2	U417
11b	Estimating calculations	3 / 3	U225
11c	Estimating calculations	1 / 1	U225
12	Calculating the mean	1 / 2	U291
13a	Simplifying algebraic fractions by cancelling common factors	0 / 1	U103
13b	Simplifying expressions by collecting like terms	0 / 2	U105
13c	Factorising into one bracket	1 / 1	U365
14a	Finding percentages of amounts without a calculator	1 / 1	U554
14b	Converting between ratios, fractions and percentages	1 / 1	U176
14c	Finding percentages of amounts, Finding fractions of amounts	2 / 3	U554, U881
15	Multiplying fractions	1 / 2	U475
16	Solving direct proportion word problems	0 / 2	U721
17	Adding & subtracting integers, Writing numbers as percentages of other numbers	2 / 4	U417, U925
18	Using algebraic notation	2 / 3	U613
19	Position-to-term rules for arithmetic sequences	1 / 2	U498
20	Using a written method to divide with decimals	3 / 3	U868
21	Adding and subtracting mixed numbers	1 / 3	U793
22	Find the surface area of cubes & cuboids, Find the volume of cubes & cuboids	4 / 4	U929, U786
23	Drawing and interpreting frequency polygons	0 / 2	U840
24a	Venn diagrams	3 / 3	U476
24b	Venn diagrams with set notation	1 / 2	U748
25a	Interpreting scatter graphs	0 / 1	U277
25b	Using lines of best fit	1 / 2	U128
26	Finding original values in percentage calculations	1 / 2	U286
27	Finding the volume of cylinders, Calculating with pressure	2 / 3	U915, U527
28	Solving simultaneous equations graphically	1 / 1	U836
29	Index rules with positive indices, Index rules with negative indices	1 / 2	U235, U694
30	Using the exact values of trigonometric ratios	0 / 1	U627
31	Tree diagrams for independent events	1 / 2	U558
		Total	50 / 80

Masterclasses, Drop-ins and Practice Papers

Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
--------	--------	--------	--------	--------	--------	--------	--------	--------

From January to Easter, in addition to continuing to work through the scheme of work, students start working on exam practice primarily based upon the December PPE.

- **Masterclasses** – Higher and Foundation level masterclass to cover key topics highlighted as areas of weakness.
- **Fortnightly Practice GCSE paper** – Every student will complete a past paper for homework with a feedback lesson to mark and go over the papers.
- **Drop-Ins** – Every other Tuesday to allow students to get individual support or just work through the homework paper.

Internal assessments - March

Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
--------	--------	--------	--------	--------	--------	--------	--------	--------

Internal assessments will take place in March to help finalise any last minutes decisions and track closely student progress in the final months before they sit their GCSE exams.

If there are any issues with the level of entry for students then parents will be contacted and meetings held.

All issues relating to GCSE entry will be finalised at this point.

The mad rush to GCSE

Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24
--------	--------	--------	--------	--------	--------	--------	--------	--------

As exams start, maths lessons will still be running and whole school revision initiatives e.g. Revision conferences will start.

Students are still welcome to drop-in sessions.

Sparx.com

- › An online teaching and learning platform and covers all of GCSE and is linked to schemes of work and revision lists.
- › All students will have their own login. They can easily request a reminder if they forget their login.
- › Tuition videos and online quizzes.



Additional websites and resources

> www.mathsgenie.co.uk

Grade 4

Videos	Exam Questions	Exam Questions Booklet	Solutions
Compound Interest and Depreciation	Exam Questions	Compound Interest and Depreciation	Solutions
Indices	Exam Questions	Indices	Solutions
Prime Factors, HCF and LCM	Exam Questions	HCF, LCM	Solutions
Real Life and Distance Time Graphs		Real Life Graphs	Solutions
Inequalities	Exam Questions	Inequalities	Solutions
Forming and Solving Equations	Exam Questions	Forming and Solving Equations	Solutions
Sequences (Nth Term)	Exam Questions	Sequences (nth term)	Solutions

π

> www.onmaths.com

RESIT PAPERS

2022 November Predicted Papers (with Advance Information)

Foundation ▾ Edexcel ▾ Paper 1 ▾

Edexcel GCSE Prediction

Mathematics

Paper 1

Foundation Tier

Nov 2022

1MA1-1F

Start Paper

π

› Corbettmaths.com



Corbettmaths

Welcome

Videos and Worksheets

Primary

5-a-day ▾

More ▾

Welcome

5-a-day


Videos

Worksheets

› [Half Past Papers \(hannahkettlemaths.co.uk\)](http://hannahkettlemaths.co.uk)

Students can even revise watching videos on TikTok.







Mathematics

FOR FULL VIDEO SOLUTIONS
SCAN THE QR CODE

youtube.com/ahannahkettlemaths

Higher Tier

Half Past Paper – Week 1

Total Marks

Q	Topic	Marks	Sparx Code
1a	Adding and subtracting mixed numbers	2	U793
1b	Dividing with mixed numbers	2	U538
3	Converting units, Finding the percentage an amount has been changed by	4	U388,U278
5a	Plans and elevations	2	U743
5b	Finding the surface area of pyramids	4	U871
7	Combining transformations	2	U766
9a	Indices of the form $1/a$	1	U985
9b	Calculating with roots and powers	1	U851
9c	Indices of the form a/b , Index rules with negative indices	2	U772,U694
11	Circle theorems for chords and tangents	5	U489
13	Expanding brackets with surds, Simplifying surds	3	U499,U338
15a	Factorising the difference of two squares	1	U963
15b	Factorising the difference of two squares, Expanding double brackets	3	U963,U768

Revision Guide and Workbook

Many students did buy these in year 10 but we still do have a few in stock. (More can be bought if necessary).

Three books in one;

- Revision Guide
- Workbook
- Practice exam papers

