

Exam Success Evening

How to succeed in Maths

Mrs Bain: Director of Maths

Mr Roberts: Second in Maths

GCSE Mathematics: Why it matters!

- Applicable to almost every career
- Required to pass at grade 4, or continue study next year
- Grade 7 for A Level maths study
- College courses often specify the maths grade they require- check the prospectus for your son or daughters chosen course

GCSE Mathematics

edexcel 

 Pearson

Exam board: Edexcel Pearson

100% assessment based

3 exam papers sat in May/June of year 11

Higher or Foundation tier

Lots of content - important that students practice and revise outside of lessons!

Assessments

Please check the examination details below before entering your candidate information


Candidate surname		Other names	
Centre Number	Candidate Number		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Pearson Edexcel Level 1/Level 2 GCSE (9–1)

Friday 19 May 2023

Morning (Time: 1 hour 30 minutes) **Paper reference 1MA1/1F**

Mathematics
PAPER 1 (Non-Calculator)
Foundation Tier



You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, Formulae Sheet (enclosed). Tracing paper may be used.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- **Calculators may not be used.**

Information

- The total mark for this paper is 80
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

P75147A
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KS1/1/1/1/1/1



3 exam papers - all 90 minutes

Each paper out of 80 marks, giving a total of 240

Questions get harder through the paper

Topics are mixed up through all three papers

A formula sheet will be provided

Paper 1 - non calculator

Paper 2 - calculator

Paper 3 - calculator

Tiering

Higher or Foundation

Higher students cover additional and more challenging content

Please ask your child's teacher if you are not sure what tier they are

Final decision made during Year 11

following mocks

Grade 4 is the 'Standard Pass'

Higher	Old Grades	Foundation
9	A*	
8		
7		
6	B	
5		
4	C	4
3	D	3
	E	2
	F	1
U	U	U

Grade Boundaries

Statement of results does not say what tier, only the grade.

5 on higher = 5 on foundation

Marks needed for each grade in summer

2023 exams

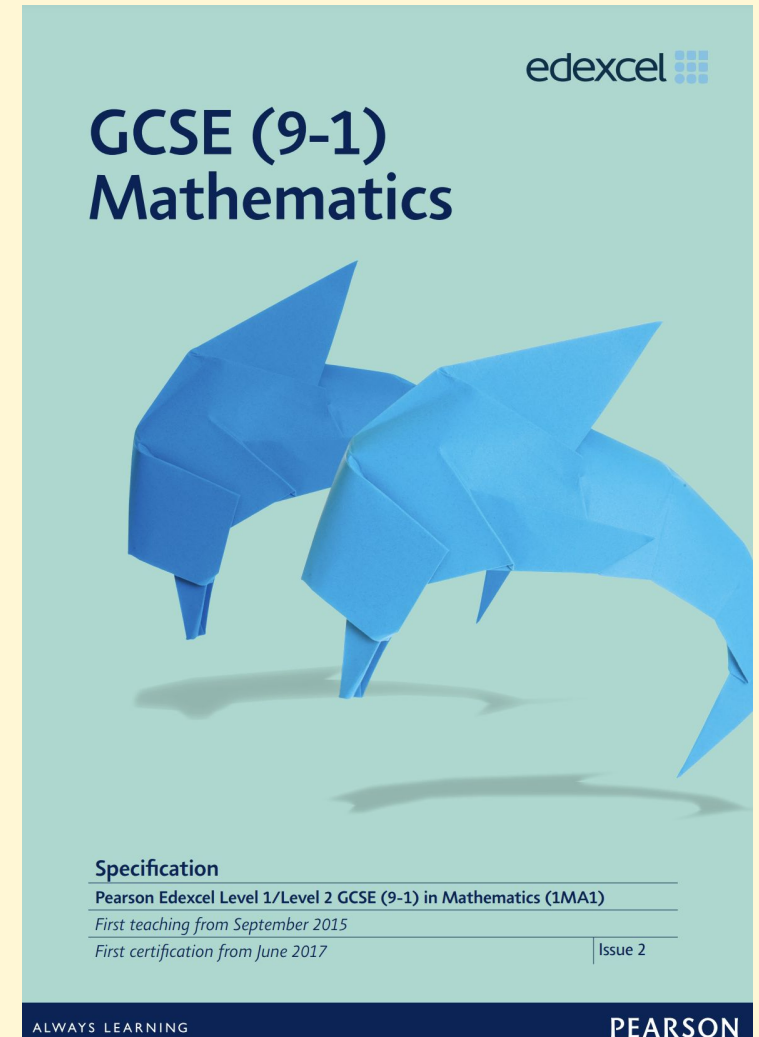
Higher	%
9	85%
8	73%
7	60%
6	47%
5	33%
4	20%
3	13%

Foundation	%
5	76%
4	61%
3	45%
2	30%
1	14%

Content

Approximate content area weightings

Content Area	Higher	Foundation
Number	15%	25%
Algebra	30%	20%
Ratio and Proportion	20%	25%
Geometry	20%	15%
Statistics and Probability	15%	15%



5 Steps to success

- 1 - Have all the correct Equipment
- 2 - Use of Sparx Maths homework to consolidate learning in lessons
- 3 - Use of Revision Lists pre Mocks
- 4 - Use of QLA post Mock
- 5 - Use of past paper homework for exam practice

1. Equipment

Students are expected to have the following equipment in lessons and exams

- Black Pens (students must write in black ink)
- Sharpened pencils
- Eraser
- Ruler
- Compasses
- Protractor
- Calculator (Papers 2 and 3)

Essential that students get used to using a proper scientific calculator

Recommended model: **Casio fx-83GT CW**



Casio FX-83GTX GCSE Scientific Calculator Black | Rapid Online



Casio FX-83GT CW Scientific Calculator

2. Sparks Maths

Set: Wednesday Afternoon

Due: The following Wednesday
(Start early, you must complete before bed
Tuesday evening)

3. Revision lists

Topic	Sparx Code
Measuring Lines	M443
Measuring Angles	U447
Angles around a Point	U390
Types of Angles	M502
Angles in Triangles	U628
Angles in Quadrilaterals	U732
Angles on a Line	U390
Angles in Parallel Lines	U826
Sum of Interior Angles	U427
Interior Angles	U427
Scale Diagrams	U257
Congruent & Similar Triangles	U790
Similar Shapes	U578
Averages & Range	U526, U456, U291, U260
Mean from Table (Grouped & Ungrouped)	U569
Median from Table	U877
Frequency Polygons	U840
Distance Time Graphs	U914
Translations	U196
Reflections	U799
Rotations	U696
Enlargements	U519

A comprehensive revision list is given to the students to help them focus their revision.

Sparx clip numbers are given to direct them towards supporting videos and questions to help them to revise for these topics.

A long list so students can RAG rate where they fit with these skills and prioritise.

4. QLA post mocks

Questions	Topic	Score	Sparx Code
1	Converting between fractions, decimals and percentages	1 / 1	U888
2	Reading, converting and calculating with time	1 / 1	U902
3	Understanding and ordering decimals	0 / 1	U435
4	Line and shape properties	0 / 1	U121
5	Ordering negative numbers	1 / 1	U947
6	Using equivalent ratios to find unknown amounts	1 / 3	U753
7a	Calculating the mean	2 / 2	U291
7b	Calculating the range	0 / 2	U526
7c	Writing probabilities as fractions	0 / 1	U408
8a	Calculating with roots and powers	0 / 1	U851
8b	Dividing numbers into equal groups	1 / 1	M462
9	Writing and simplifying ratios	2 / 2	U687
10	Finding the area and perimeter of simple shapes	0 / 3	U993
11a	Using algebraic notation	1 / 1	U613
11b	Simplifying expressions by collecting like terms	0 / 2	U105
12	Finding percentages of amounts with a calculator	4 / 4	U349
13	Angles on a line and about a point, Angles in triangles	0 / 4	U390, U628
14a	Interpreting distance-time graphs	1 / 1	U914
14b	Plotting distance-time graphs	0 / 2	U403
15	Drawing and interpreting scale diagrams	0 / 3	U257
16	Writing probabilities as fractions, Ordering fractions	0 / 3	U408, U746
17a	Percentage change with a calculator	3 / 3	U671
17b	Finding original values in percentage calculations	0 / 3	U286
18	Enlargement by a positive scale factor	0 / 2	U519
19a	Factorising into one bracket	0 / 2	U365
19b	Reading and drawing inequalities on number lines	0 / 2	U509
20*	Using a calculator	2 / 2	U926
21a*	Interpreting scatter graphs	0 / 1	U277
21b*	Using lines of best fit	1 / 1	U128
21c*	Using lines of best fit	1 / 1	U128
22*	Currency conversion	1 / 3	U610
23*	Using set notation, Venn diagrams with set notation	0 / 2	U296, U748
24a*	Plotting graphs of quadratic functions	0 / 2	U989
24b*	Plotting graphs of quadratic functions	0 / 2	U989
25*	Finding the percentage an amount has been changed by	1 / 4	U278
26*	Constructing and solving equations, Applying Pythagoras' theorem in 2D	0 / 5	U599, U828
27*	Multiplying and dividing numbers in standard form	0 / 2	U264
28	Finding the volume of cylinders, Calculating with density	0 / 3	U915, U910

Question Level Analysis (QLA) to help the students target where intervention and skills gaps exist

Sparx clip numbers linked to this to enable students to find supporting questions and videos to explain the skills and concepts

Using sparks to support revision pre and post mocks

The screenshot shows the Sparx Maths interface. At the top, there is a blue header with 'Sparx Maths' on the left, '0 XP Teacher' and a notification bell with '1' on the right, and a 'Menu' icon. Below the header, the main content area is light blue. On the left, there is a vertical sidebar with four tabs: 'Compulsory' (star icon), 'XP Boost' (lightning bolt icon), 'Target' (crown icon), and 'Independent Learning' (lightbulb icon). The 'Independent Learning' tab is highlighted with a white background. An arrow points from the text 'Select the independent learning tab' to the 'Independent Learning' tab. In the main content area, it says 'Hey Teacher,' followed by 'This is your personalised Compulsory homework. You need to answer every question correctly to complete it.' To the right of this text is a green circular progress indicator showing '0/0'.

Select the independent learning tab

Using sparks to support revision pre and post mocks

Independent Learning

Find topics My activity

Search for topics: Enter topic name or code

Your curriculum: Key Stage 3

Default level: Level 2

Select a topic:

Number Algebra

Enter the Sparx code

Using sparks to support revision pre and post mocks

Constructing a perpendicular bisector


Introduce

Question 1

Answer

Question 2

Answer

Question 3

Answer

Question 4

Answer

Question 5

Answer


Strengthen

Question 1

Answer

Question 2

Answer

Question 3

Answer

Question 4

Answer

Question 5

Answer


Deepen

Question 1

Answer

Question 2



Answer

Question 3

Answer

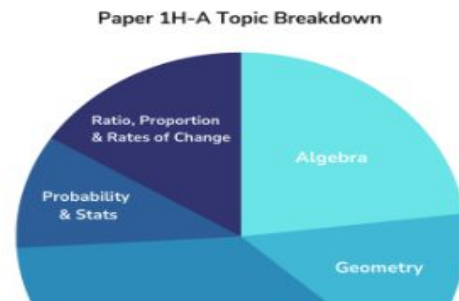
3 Levels of questions to aid revision and practice

5. Past papers at home and during after school revision

Candidate surname	Other names
	1H-A Edexcel Classroom Mock
Mathematics PAPER 1 (Non-Calculator) Higher Tier Time 48 minutes	
	
MODEL WRITTEN SOLUTIONS	Total Marks 44

Q	Topic(s)	Marks
1	Multiplying Decimals	/ 2
2a	Substitution	/ 2
2b	Change the Subject	/ 2
3	Percentage Increase / Fraction of Amount	/ 4
4	Laws of Indices	/ 3
5	Compound Area / Written Methods	/ 4
6	Multiplying Mixed Numbers	/ 3
7	Standard Form	/ 2
8	Angles in Parallelograms & Triangles	/ 4

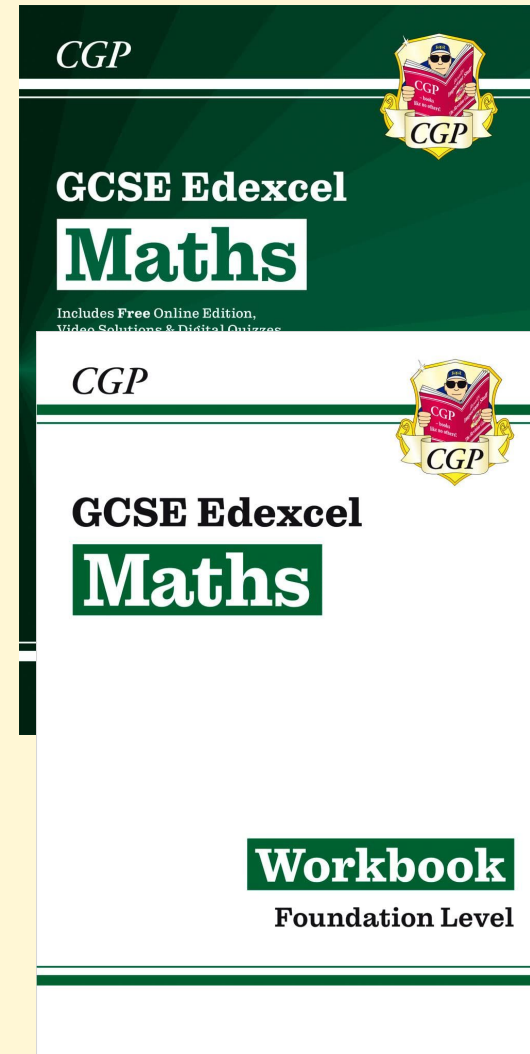
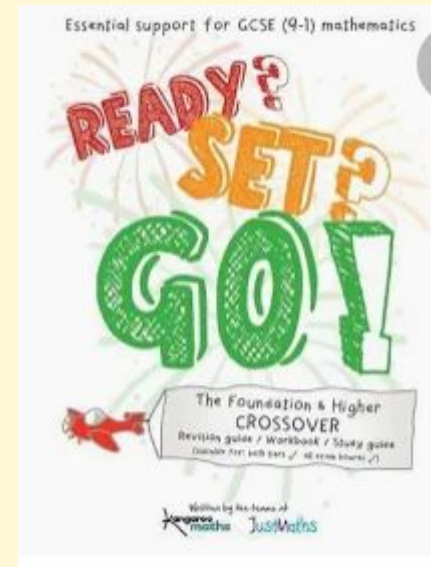
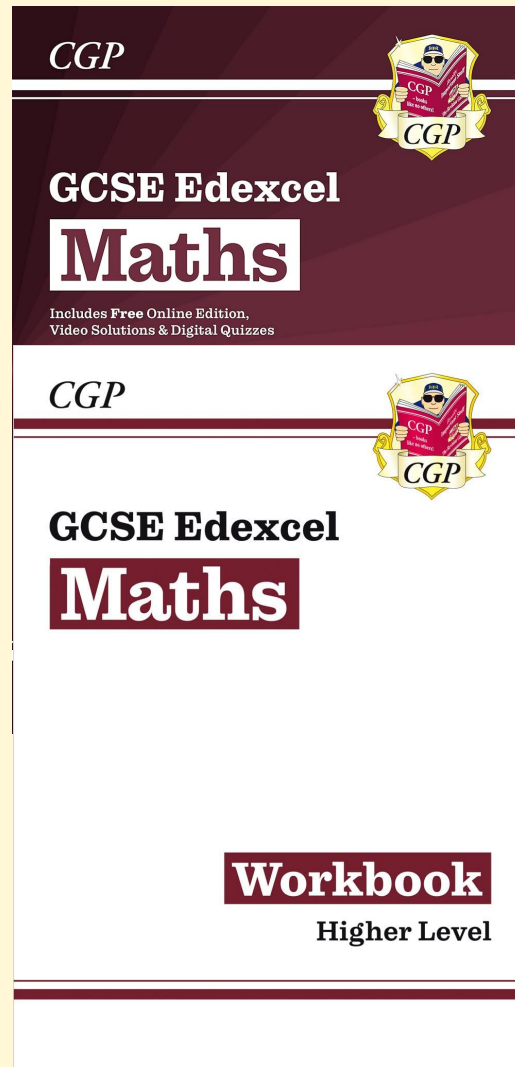
Q	Topic(s)	Marks
13	Conditional Probability	/ 3
14	Pythagoras / Surds	/ 4



Revision Guides

These are the ones we recommend

The Revision Guide has the information, the Workbook has questions





Year 11 Study and Revision Autumn 2025

Monday

3.20-4.20pm



Maths

E3

Tuesday

3.20-4.20pm

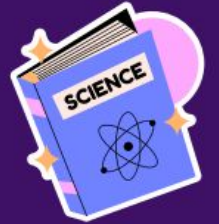


English

C1

Wednesday

3.20-4.20pm



Science

E201

Thursday

3.20-4.20pm



**DT/Art/
Photography
A Block**

Lunchtime Sessions

Tuesday - Graphics(A304)

Wednesday - Graphics(A304)

Thursday - Graphics(A304), History (A309)

Friday - Dance (Studio)

"Success is the sum of
small efforts, repeated day
in and day out."

Queen Elizabeth's school QE

Mathematics
Raising Achievement Evening
Thank you!
Any Questions?

Putting it into practice

1. Ensure that you have the correct equipment and are familiar how to use it.
2. Download the revision lists for the upcoming Mock Exams. RAG rate the topics and the use the Sparx references to practice those which you have rated Amber and Red
3. Post Mock you will get a QLA sheet. The will show areas of strength (Green) and Weakness (Red) This will give you a focus and specific topic areas you need to work on for the next mock.
4. Complete past paper homeworks. If there are questions you are unsure of use the Sparx links and topic list to look up the skills needed to complete the questions
5. Additional resources to help aid more revision with more exam style questions