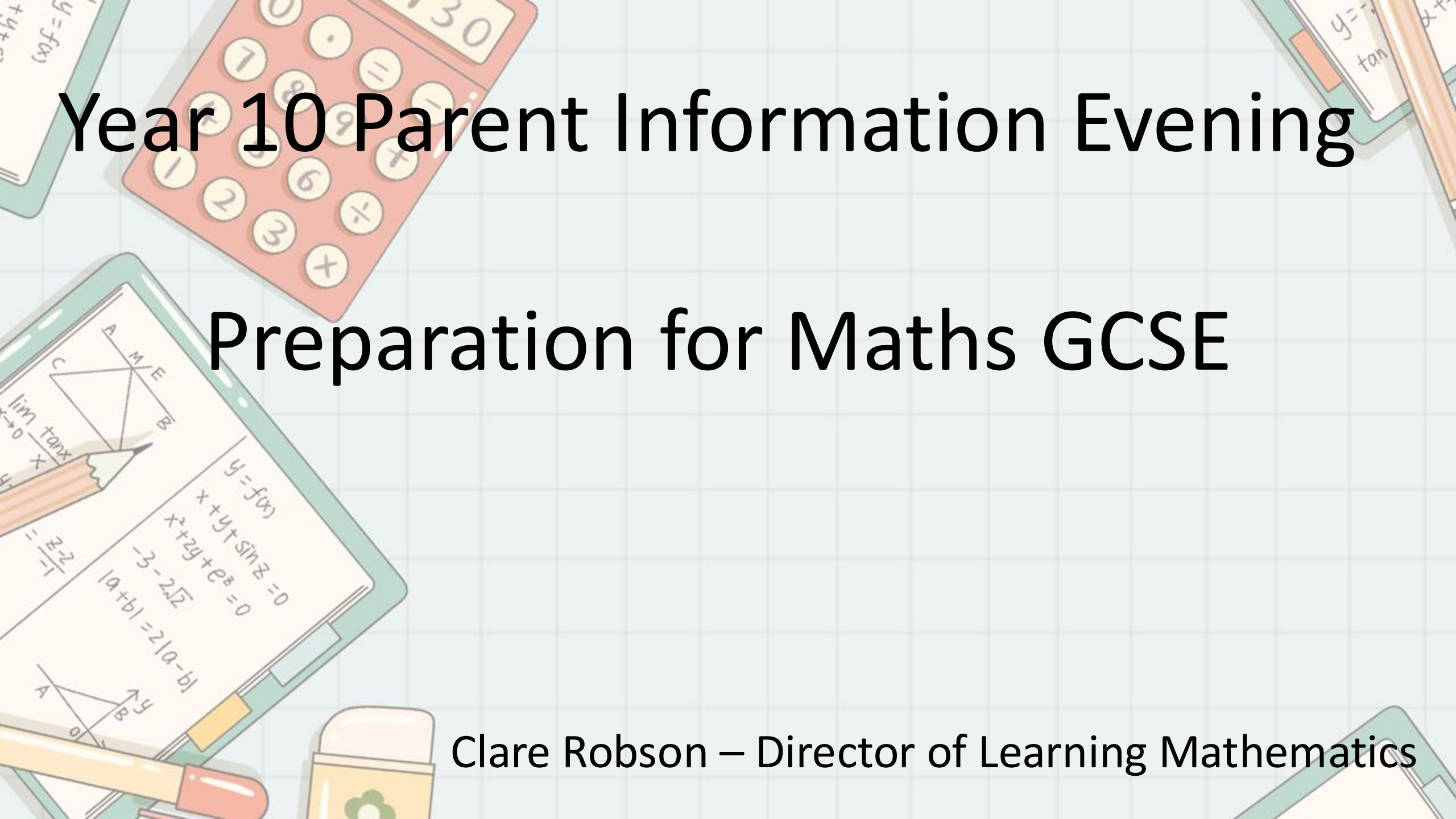
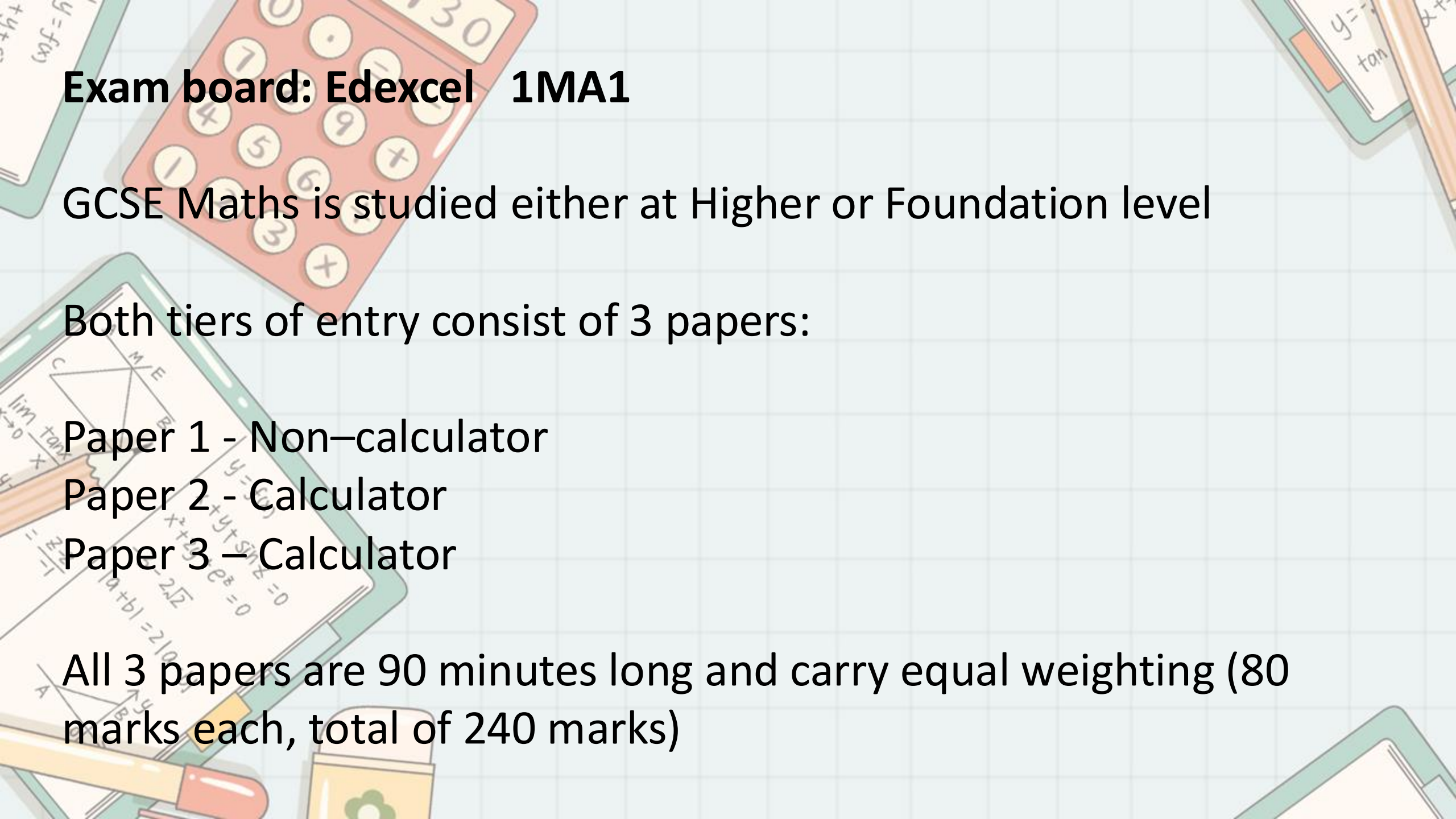




Year 10 Parent Information Evening

Preparation for Maths GCSE

Clare Robson – Director of Learning Mathematics



Exam board: Edexcel 1MA1

GCSE Maths is studied either at Higher or Foundation level

Both tiers of entry consist of 3 papers:

Paper 1 - Non-calculator

Paper 2 - Calculator

Paper 3 – Calculator

All 3 papers are 90 minutes long and carry equal weighting (80 marks each, total of 240 marks)

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%

Heaviest weighting

Heaviest weighting

We loosely set pupils at the beginning of Year 10 based on end of Year 9 assessments and in consultation with staff.

Pupils in all groups are taught the same content for the first 5 units. This is cross over content that would appear in both the Higher and Foundation papers.

Surface area and Volume
Surface area and Volume
Averages and Frequency Polygons
Percentages
Percentages
TEST 1/2
Parallel and Perpendicular Lines
HALF TERM
Parallel and Perpendicular Lines
Transformations
Transformations

Following the first assessment (which was the same for all pupils) we will tweak the sets to move towards a tiered structure.

Current structure of Year 10 groups:

Set 1a – Aiming for 7, 8, 9

Set 1b – Aiming for 6, 7

Higher Tier

Set 2 – Aiming for 4 +

Foundation Tier

The content now starts to diverge with the Higher groups being taught some Higher only content.

Predominately the content is cross over so as to ensure as many pupils as possible have access to the Higher tier.

Setting is not set in stone and tier of entry is not decided until Year 11.

Foundation Tier

Fractions

Fractions

Indices

Indices

XMAS HOLS

XMAS HOLS

Tree diagrams

Tree diagrams

Pythagoras

Pythagoras

Simultaneous equations

Higher Tier

Fractions

Surds

Surds

Indices

XMAS HOLS

XMAS HOLS

Indices

Tree diagrams

Tree diagrams

Pythagoras and Trigonometry

Pythagoras and Trigonometry

Course content:

- Topics in KS3 form the building blocks of GCSE and it can be worth pupils revisiting this content.
- GCSE content is generally completed by the end of Spring Term in Year 11.
- Lessons after this time concentrate on consolidation and exam technique.
- Students have access through Teams to all content from KS3 and each unit has a PowerPoint with links to resources that can help support revision of prior content.

Maths Foundation GCSE Curriculum Map

Summer Term

Number

Algebra

Ratio,
Proportion
and rates
of change

Geometry
and
Measures

Statistics
and
Probability

Revision

Final Exams

Mock
Exams

Year 11 Spring Term

Year 11 Autumn Term

Revision

Algebraic
Proportion

Possibility
spaces and
Listing
strategies

Vectors

Turning
Points and
Intercepts

Exact
Trigonometric
Values

Mock
Exams

Identities,
Inputs, and
Outputs

Algebraic
Graphs

Ratio

Algebra
Recap

Scatter
Diagrams

Measures

Circles and
Sectors

Equations and
Inequalities

Surface
area and
Volume

Averages and
Frequency
Polygons

Percentages

Parallel and
perpendicular
lines

Transformations

Fractions

Indices

Tree
Diagrams

Pythagoras'
Theorem

Simultaneous
Equations

Charts and
Diagrams

Similarity
and
Congruence

Trigonometry

Summer
Exams

Ratio

Year 10 Autumn Term

Year 10 Spring Term

Year 10 Summer Term

Maths Higher GCSE Curriculum Map

Year 11 Summer Term

Revision

Final Exams

Number

Algebra

Ratio,
Proportion
and rates
of change

Geometry
and
Measures

Statistics
and
Probability

Mock
Exams

Revision

Algebraic
Inverse
proportion

Year 11 Spring Term

Year 11 Autumn Term

Algebraic
fractions and
Quadratic
Simultaneous
equations

Circle Theorem
review and
proof

Product rule
for counting

Sequences,
Identities and
proof

Mock
Exams

Vectors

Pre-Calculus

Transformation
of graphs

Sketching
Quadratics

Equation of a
circle and
coordinate
geometry

Functions and
Iteration

Scatter
Diagrams

Measures

Trigonometric
Graphs

Circles
Theorems

Inequalities
and regions

Surface
area and
Volume

Averages and
Frequency
Polygons

Percentages

Parallel and
perpendicular
lines

Transformations

Fractions

Surds

Indices

Tree
Diagrams

Pythagoras'
Theorem and
Trigonometry

Simultaneous
Equations

Histograms

Similarity
and
Congruence

Sine and
Cosine rules

Summer
Exams

Year 10 Autumn Term

Year 10 Spring Term

Year 10 Summer Term

Learning intentions	Sparx References	10F.01 Surface Area
Review of area of 2d Shapes	U970, U424, U945, U575, U265, U950	
Review of nets of 3d shapes	U761	
Finding surface area of a cuboid	U929	
Finding surface area of prisms	U295	
Finding the surface area of cylinders	U464	
Finding the surface area of spheres and cones	U523, U893	
Finding the surface area of a pyramid	U871	
Finding the surface area of composite shapes		

- Pupils are provided with learning intention slips at the beginning of each unit.
- These are also posted on Teams pages.
- Pupils can use these to review or supplement their work in lessons.
- If a pupil misses a lesson, they can use the Sparx references to catch up.

Area of 2D shapes

Perimeter

[Corbett Maths link](#)
[Third Space Learning link](#)

Area of a parallelogram

[Corbett Maths link](#)
[Third Space Learning link](#)

Area of a trapezium

[Corbett Maths link](#)
[Third Space Learning link](#)

Area of compound shapes

[Corbett Maths link](#)
[Third Space Learning link](#)

Area of a rectangle

[Corbett Maths link](#)
[Third Space Learning link](#)

Area of a triangle

[Corbett Maths link](#)
[Third Space Learning link](#)

For Corbett Maths

Click **this button** on the **worksheet** to watch the videos (if you are stuck).



Click here

Once you have tried the questions. **Scroll down to the bottom of the worksheet** and click for **ANSWERS**.



Click here

Homework and Assessments:

- Homework is set on Teams
- Homework is a mixture of Sparx and written assignments.
- Assessments take place throughout the year and inform set changes
- Pupils are given detailed feedback for each assessment.
- Videos for homework and assessments are available on Teams.

Topic		Paper 1 Total																									
Total Available Marks	45																										
Question Marks	1	2	3	4	5	6	7	8a	8a1	8b	9	10	11a	11a	11b	12	13	14a	14b	15	16	17a	17b	18	19	0	
Marks	1	1	1	1	1	1	1	2	2	2	2	2	1	0	2	0	3	2	2	2	0	3	0	3	0		35
Topic		Paper 2 Total																									
Total Available Marks	45																										
Question Marks	1	2	3	4	5a	5b	6	7	8a	8b	8c	9a	9b	10a	10b	11a	11b	12a	12b	13a	13b	14a	14b	15a	15b	16	
Marks	1	1	1	1	1	1	2	3	1	1	0	2	2	1	2	2	1	0	0	2	0	0	0	2	0	0	27

Sparx Maths

340 XP Clare Robson

Compulsory

XP Boost

Target

Independent Learning

Hey Clare,

This is your personalised Compulsory homework. You need to answer every question correctly to complete it.

1/1

Introducing Sparx Maths

Completed ✓

- Sparx is an online platform that is used for homework.
- It can be used for revision/review of topics.
- Sparx uses an algorithm to adapt to the user.
- Extra independent work can be completed on Sparx.

U211 will take you to
Multiples

Find topics

My activity

Choose to practice any topic from the Sparx library at any difficulty level.

Search for topics:

Enter topic name or code

Your curriculum:

GCSE

Default level:

Level 3

Select a topic:

Number



Algebra



Ratio and Proportion



Geometry



Probability



Statistics



Mock exams:

- Mock exams currently take place in Summer of year 10, and then in November and March of year 11.
- In Year 10 this consists of 2 papers, graded using the actual grade boundaries. In Year 11 a full set of 3 papers will be sat.
- Students get a question-by-question breakdown of their result.
- Students can access videos to see how each question should have been answered.

Revision and support:

- It's never too early to revise.
- The best way to revise Maths is to do Maths.
- <https://corbettmaths.com/5-a-day/gcse/>
- [Mathsgenie.co.uk](https://www.mathsgenie.co.uk)
- <https://www.1stclassmaths.com/edexcelrevision>
- SPAs take place every week. The timetable is available on Teams.
- Half paper sessions take place regularly in Year 11 and we offer Year 10 the opportunity to attend some of these at the end of the summer term.

5-a-day GCSE 9-1

Numeracy 5aday – broadly designed for students aiming for Grades 1, 2 and 3.

Foundation – broadly designed for students aiming for Grades 3 and 4.

Foundation Plus – broadly designed for students aiming for Grades 4, 5 and 6.

Higher – broadly designed for students aiming for Grades 6 and 7.

Higher Plus – broadly designed for students aiming for Grades 8 and 9.

January

1st January [Numeracy](#) [Foundation](#) [Foundation Plus](#) [Higher](#) [Higher Plus](#)

2nd January [Numeracy](#) [Foundation](#) [Foundation Plus](#) [Higher](#) [Higher Plus](#)

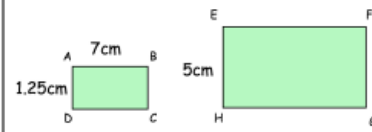
3rd January [Numeracy](#) [Foundation](#) [Foundation Plus](#) [Higher](#) [Higher Plus](#)

4th January [Numeracy](#) [Foundation](#) [Foundation Plus](#) [Higher](#) [Higher Plus](#)

5th January [Numeracy](#) [Foundation](#) [Foundation Plus](#) [Higher](#) [Higher Plus](#)

6th January [Numeracy](#) [Foundation](#) [Foundation Plus](#) [Higher](#) [Higher Plus](#)

7th January [Numeracy](#) [Foundation](#) [Foundation Plus](#) [Higher](#) [Higher Plus](#)

8th January	Foundation Plus 5-a-day	 Corbett Maths
The probability of Oliver scoring a penalty is 0.7. He takes 30 penalties. How many goals should he score?		
$-5 < 2x \leq 4$ x is an integer Write down all the possible values of x .		
	Rectangles $ABCD$ and $EFGH$ are similar. $AD = 1.25\text{cm}$ $AB = 7\text{cm}$ $EH = 5\text{cm}$ Work out the length of EF .	
A line has equation $y = 3x + 4$ Write down the gradient of the line	Write down the coordinates of the y-intercept of the line	
Factorise $x^2 + 4x - 12$	Factorise $x^2 - 25$	

GCSE Revision

Search for topics...

Grade 1

#	Videos	Exam Questions	Exam Questions Booklet	Solutions
1.1	Addition and Subtraction	Exam Questions	Addition and Subtraction	Solutions
1.2	Multiplication and Division	Exam Questions	Multiplication and Division	Solutions
1.3	Time	Exam Questions	Time	Solutions
1.4	Metric Conversions	Exam Questions	Metric Conversions	Solutions
1.5	Writing, Simplifying and Ordering Fractions	Exam Questions	Writing, Simplifying and Ordering Fractions	Solutions
1.6	Place Value	Exam Questions	Place Value	Solutions
1.7	Rounding	Exam Questions	Rounding	Solutions
1.8	Negative Numbers	Exam Questions	Negative Numbers	Solutions
1.9	Powers and Roots	Exam Questions	Powers and Roots	Solutions
1.10	BIDMAS	Exam Questions	The Order of Operations	Solutions

7	Write 2437 to the nearest hundred.	(1)	12	Write 0.4726 correct to two significant figures.	(1)
8	Write 3.84761 correct to 3 decimal places.	(1)	13	Write 67480 correct to one significant figure.	(1)
9	Write 37.62 correct to one significant figure.	(1)	14	Write 9325.822 correct to two significant figures.	(1)
10	Write 58.165 correct to one significant figure.	(1)	15	Write 384761 to the nearest thousand	(1)
11	Write 18.1693 correct to 2 decimal places.	(1)	16	Write 8732 correct to one significant figure.	(1)
Grade 1		Rounding		Grade 1	

HOME

REVISION

EXAM PAPERS

SPICY QUESTIONS

The Ultimate Foundation Revision Booklet



The Ultimate Higher Revision Booklet



Search for topics here...

Filter by Grade

8

7

6

5

4

3

2

1

Topic	Video Explanation	Exam Questions	Solutions	Grade	Past Series Appearance*
Algebraic Fractions (Equations)				8+	64%
Algebraic Fractions (Simplifying)				8+	91%
Algebraic Proof				8+	73%
Circle Theorem Proofs				8+	9%
Completing the Square (Tricky ones!)				8+	64%
Equation of a Tangent to a Circle				8+	45%
Non-linear Simultaneous Equations				8+	36%
Quadratic Inequalities				8+	73%
Rationalise the Denominator				8+	82%
AQA (F)					
L2 Further Maths					

June 2025 GCSE Practice Papers

Paper 1	Solutions	Paper 2	Solutions	Paper 3	Solutions
					
					
					
					
					

Looking ahead – A Levels:

- It is compulsory to study maths post-16 for anyone who does not achieve a standard pass.
- A grade 7 is required to study Double Maths (Maths + Further Maths) although an 8 or 9 is preferred.
- A grade 6 or higher is required for Maths, Biology, Chemistry, Physics, and Computer Science.
- A grade 5 is required for Economics, Geography and Psychology.
- A grade 4 is required for Business and IT (BTEC level 3)

What can parents do to support?

- Encourage your child to complete homework, ensuring they have time and space to do it.
- Check they have the correct equipment for lessons and assessments.

Mathematics

You should have:

Pen	Pencil
Ruler	Rubber
Pair of Compasses	Protractor
Scientific Calculator	Green Pen
Whiteboard Pen	

- Encourage them to attend SPAs if they need help.
- Maths workshop for post assessment support.