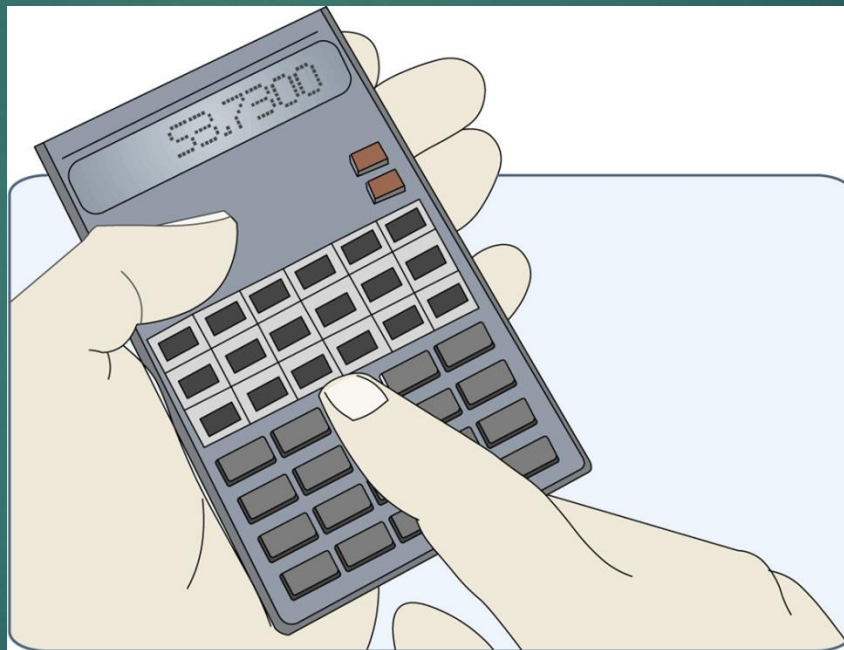# Mathematics   G.C.S.E
Year 10 and 11   at KS4

ASSESSMENT OF MATHEMATICS
G.C.S.E. Year 10

- ► Two GCSE past papers on line April 2021 using mathswatch.
- ► Two GCSE papers w/b 15th May 2021.
- ► First Mock GCSE December 2021 three GCSE papers.
- ► Second mock : March 2022 ,three GCSE past papers.

Foundation tier: grades 1 to 5.

- ► Higher tier: grades 4 to 9 (grade 3 allowed).

ASSESSMENT OF MATHEMATICS G.C.S.E.

GCSE (9 - 1) in Mathematics
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

The scheme of work covers the delivery of GCSE content up to February 2022 half term. With this year's lock down topics will be continually revisited in starter /retrieval questions. Also taught and reviewed up to end of Spring term 2022.

Tier of examination

- Sets 11a1,11z1/11a2,11z2:
- Higher tier linear
- Sets 11a3/11z3/11a4/11z4
- Foundation tier linear

Resources and Revision

LINKS :
EDEXCEL :

Maths GCSE | Edexcel GCSE Mathematics (2015) | Pearson qualifications

OCR :

GCSE Maths (9-1) - J560 (from 2015) - OCR

Preparation for assessment

- Exam revision in lead up to assessments using revision sessions in lesson time and intervention in lesson time for target students who are under performing.

- Intervention classes in year 10 will be held weekly to fortnightly after current year 11 leave .

- On line revision papers will be set electronically using mathswatch

- Revision guides can be purchased through school

- Student independent revision through online graded topic booklets. Mathsgenie and corbettmaths websites.

- POSITIVE WORK ETHIC TO SUCCEED

Grading process

Qualification is graded and certificated on a nine-grade scale from 9 to 1 using the total mark across all three papers where 9 is the highest grade

Individual papers are not graded.
● Foundation tier: grades 1 to 5.
● Higher tier: grades 4 to 9 (grade 3 allowed).

EDEXCEL ASSESSMENT OF MATHEMATICS G.C.S.E.

● 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.

● The content outlined for each tier will be assessed across all three papers.

OCR ASSESSMENT OF MATHEMATICS G.C.S.E.

● 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 and paper 3 are calculator assessments
   Paper 2 a non calculator paper .

● Each paper is 1 hour and 30 minutes long.

● Each paper has 100 marks.

● The content outlined for each tier will be assessed across all three papers.

Topics which overlap

-
- Index laws
- Compound interest
- Direct and indirect proportion
- Factorising quadratics
- Simultaneous equations
- Cubic and reciprocal graphs
- Trigonometric ratios
- Arc lengths and sectors of circles
- Vectors
- Density
- Tree Diagrams

Topics new to the higher tier specification

- Higher Tier:
- Products of more than two binomials
- Completing the square turning points
- Estimating gradients of graphs and areas under graphs .
- Geometric progressions including surds
- Nth term of quadratic sequences
- Venn diagrams and conditional probability.

MATHEMATICS
G.C.S.E.

<u>Examination Board :</u>
<u>PEARSON EDEXCEL and OCR</u>
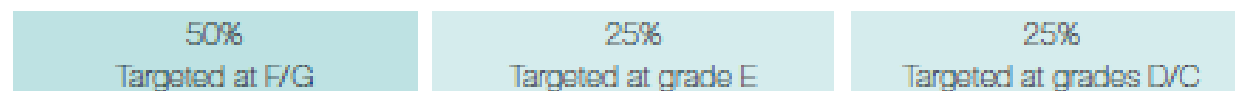**Functional elements embedded:**
Elements of functional mathematics have been embedded into the new specifications and assessments.
This introduction ensures that you have the skills you need to use mathematics in real life contexts .
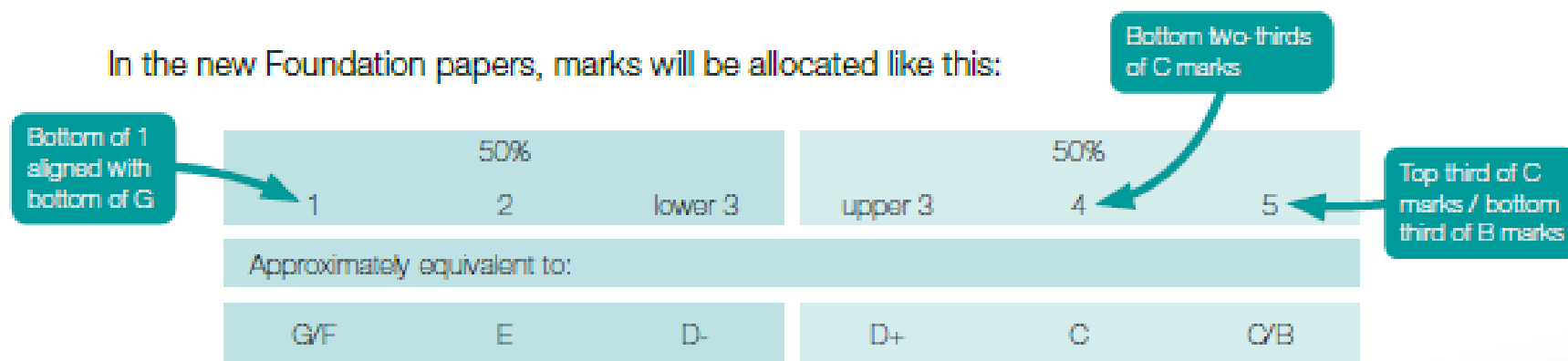
Foundation

Foundation papers now start at, and reach, a higher level.

The marks on current Foundation papers are allocated like this:

50% Targeted at F/G	25% Targeted at grade E	25% Targeted at grades D/C

In the new Foundation papers, marks will be allocated like this:

Bottom two-thirds of C marks

50%			50%		
1	2	lower 3	upper 3	4	5

Bottom of 1 aligned with bottom of G

Top third of C marks / bottom third of B marks

Approximately equivalent to:

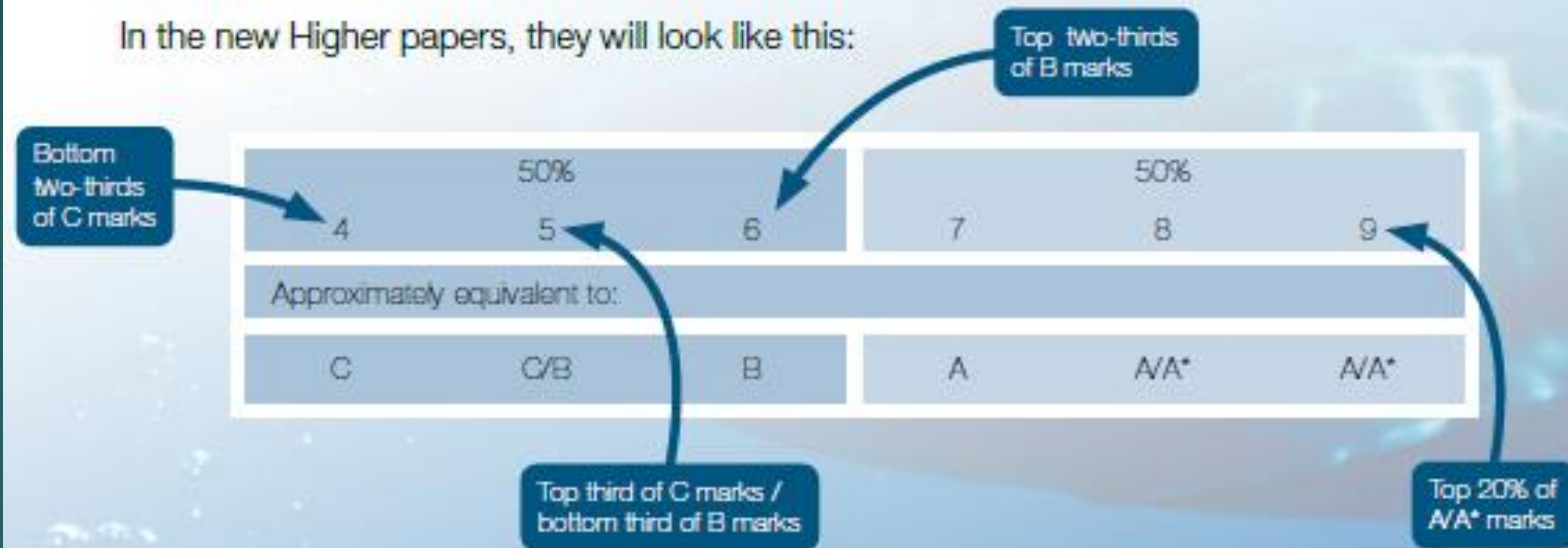| G/F	E	D-	D+	C	C/B

Higher

Higher tier papers now start at a higher level than in the current GCSE, which starts at grade D.

The new Higher tier papers will cover 6 grades instead of 5, allowing for more differentiation at the top end of the grades. Previously, 25% of questions were targeted at A/A*, but now 50% of questions in each paper are targeted at the equivalent grades, 7–9.

In the new Higher papers, they will look like this:

Top two-thirds of B marks

Bottom two-thirds of C marks

	50%			50%	
4	5	6	7	8	9

Approximately equivalent to:

C	C/B	B	A	A/A*	A/A*

Top third of C marks / bottom third of B marks

Top 20% of A/A* marks

ASSESSMENT OF MATHEMATICS G.C.S.E. –

E.g. Edexcel

Paper 1 (non calculator) Time: F:1 hour 30 mins H :1 hour 30 mins	Date : May/June
Topics	Statistics & Probability, Number & Algebra, Geometry & Measures
Examination	External

MATHEMATICS G.C.S.E.

Paper 2(calculator) Time : F: 1hour 30 mins. 　　　H : 1 hour 30 mins	Date :May/June
Topics	Statistics & Probability, 　　　Number & Algebra, Geometry & 　　　Measures
Examination	External

MATHEMATICS G.C.S.E.
NEW SPECIFICATION   A

Paper 3 (calculator) Time : F: 1hour 30 mins. H : 1 hour 30 mins	Date :May/June

Topics	Statistics & Probability,
	         Number &
	Algebra, Geometry &
	         Measures

Examination	External

OCR PAPERS

Assessment overview

Students are entered for either foundation tier (paper 01, paper 02 and paper 03) or higher tier (paper 04, paper 05 and paper 06).

Foundation tier (grades 5 to 1)

Paper	Marks	Duration	Weighting
Paper 01 - J560/01 (Calculator permitted)	100	1 hour 30 mins	33⅓%
Paper 02 - J560/02 (Calculator **not** permitted)	100	1 hour 30 mins	33⅓%
Paper 03 - J560/03 (Calculator permitted)	100	1 hour 30 mins	33⅓%

Resources and Revision

► Students can use numerous strategies to revise .

► Booklets on topics available at websites such as mathsgenie.com and corbettmaths.com

► School GCSE past papers

Resources and Revision LINKS :

Maths GCSE | Edexcel GCSE Mathematics (2015) | Pearson qualifications

GCSE Maths (9-1) - J560 (from 2015) - OCR

- VLE-mathswatch/past papers
- Mymaths
- Revision guides/books
- (Edexcel and OCR)
- Websites-edexcel.org.uk
- pearson.com
- bbcbitesize

- Equipment :
- Scientific calculator
- !!!!!!!!!!!!!!!!!!!!!!!!!!!!!
- PENS (BLACK),
- PENCIL,
- RULER,
- PROTRACTOR,
- COMPASS,

- If you have any questions relating to the course please contact Mr P. Wilkinson or Mrs J. Hall and any other members of the Mathematics Faculty who will be happy to answer your queries.