

GCSE Maths

Teachers' guide

About Edexcel

Edexcel is the leading provider of GCSE Mathematics. We provide both linear and modular specifications and support for Mathematics to over two thirds of schools and colleges in the UK.

Both our linear and modular specifications, assessment and support, along with our ResultsPlus service, really make an impact. They allow students to show what they know, understand and can do and get the highest possible grade for them.

We aim to offer schools and colleges an engaging and motivational approach to GCSE Mathematics, delivered in a straightforward and accessible way. We provide extensive teaching and assessment support – to help ease the burden for teachers and free them up to spend more time in the classroom.

It all adds up to better results for everyone. And we're proud to say that once people start using Edexcel GCSE Mathematics, they tend to carry on using us from year to year.

What makes us so popular?

There are many reasons to choose Edexcel for GCSE Mathematics but one stands us apart from everyone else – the **level of support we provide to teachers.**

We offer tried-and-tested support and guidance developed specifically to help teachers do their job. It covers everything from high-quality written assessment materials to electronic tools, which support blended learning. And as we receive feedback from teachers themselves, we continually strive to improve the quality of our support.

Read on to find out more about the benefits of choosing GCSE Mathematics from Edexcel.

Support from Edexcel

Edexcel offers a wealth of guidance materials to support teachers in teaching and assessing GCSE Mathematics:

- New electronic specification
- Edexcel ResultsPlus that analyses and benchmarks student performance at candidate and question level
- A dedicated support telephone line
- Teacher resources including detailed topic/module plans and endorsed textbooks
- Edexcel published electronic teacher and student material such as Data Handling Tool, Exam Wizard and Exam Tutor
- Training events across the country and additional maths tools
- Regional offices around the UK that provide local support
- Regular updates on our website www.edexcel.org.uk/gcsemaths.

Reasons to choose **Edexcel**

What makes Edexcel different?

- ResultsPlus
- Multiple-choice testing in the Modular specification
- Accessible assessment
- Moving to onscreen testing
- A wide range of endorsed published support materials

Edexcel expertise

Our team of maths experts are involved in creating our assessment and support materials – so we can be sure that they meet student and teacher needs. Examination papers and support materials are set by mathematics teachers, and language experts make sure that questions are phrased clearly and correctly.

Support and assessment materials

We provide a wide range of support materials including ResultsPlus, teaching and assessment guidance, guides on ICT, assessment materials, schemes of work, and endorsed textbooks. These are all designed and developed to enable teachers to spend less time on administrative and preparation tasks and more time in the classroom teaching students.

Online and electronic resources

We also offer a wide range of online and electronic resources to improve the accuracy and speed of assessment. A new electronic specification with direct links to relevant support materials will be available to Edexcel centres. Edexcel's Data Handling Tool assists effective teaching by helping students to do calculations, produce graphs and diagrams, and complete projects. The Exam Wizard enables teachers to create customised mock exams automatically, while the Exam Tutor helps students to successfully complete past Edexcel papers.

The electronic maths tools, for use by teachers and students, support key concepts and skills that students have challenges with and provide better understanding.

Edexcel GCSE Mathematics centres will be able to access the Edexcel Results Analysis Service and Results Plus – this allows you to analyse and benchmark student performance at both candidate and question level.

A maths community

On our website, we have a secure area where teachers using Edexcel GCSE Mathematics can access various guidance, assessment and support materials.

It is like an e-library containing schemes of work, guidance, practice and mock exam materials for both the linear and modular courses.

Sources of help

We provide additional sources of help for anyone who needs further guidance. Our dedicated GCSE Mathematics support telephone line will allow you to have your specific questions answered by our mathematics team. We also run events – for instance, outlining new specifications or discussing personal development and training – at different sites across the country.

About the curriculum

Curriculum structure

The curriculum is designed to enable students to use and apply mathematics to practical tasks, real-life situations and within the context of the course itself.

There are two different course structures for GCSE Mathematics – linear and modular.

About assessment

The new two-tier GCSE Mathematics is entirely externally assessed. All components are set and marked by Edexcel, with the internal coursework assessment component removed from the specification.

Linear structure

- 100% external examination assessment (calculator and non-calculator papers)

Modular structure

- 100% external assessment consisting of:
 - Unit 1 - 20% Data Handling modular test
 - Unit 2 - 30% Algebra, Number Shape and Space modular test containing:
 - stage 1 non-calculator multiple choice test
 - stage 2 traditional calculator question and answer booklet
 - Terminal Unit 3 - 50% external assessment Algebra, Number Shape and Space (calculator and non-calculator papers)
- All units and stages have independent discrete content

How students can progress

Prerequisites/Prior learning

Key Stage 3, Level 3 or above (National Curriculum)
Entry Level 3 (National Qualifications Framework)

Complementary qualifications

- Entry Level certificate in Mathematics
- Numeracy Basic Skills

GCSE mathematics qualifications

GCSE Mathematics
GCSE Statistics

Complementary subjects and subjects supported by GCSE Mathematics

- GCSE Astronomy
- GCSE Engineering
- GCSE Geography
- GCSE Physical Education
- GCSE Psychology
- GCSE Science
- GCSE Additional Science
- GCSE Biology
- GCSE Chemistry
- GCSE Physics
- GCSE Business
- BTEC First Certificate & First Diploma in Applied Science
- Entry Level Certificate in Science

Further education subjects supported by GCSE Mathematics

- GCE AS and Advanced Biology
- GCE AS and Advanced Chemistry
- GCE AS and Advanced Physics
- GCE AS and Advanced Psychology
- GCE AS and Advanced Health and Social Care
- BTEC Firsts and Nationals in Applied Science

Progression/ further education

- GCE AS and Advanced Mathematics
- GCE AS and Advanced Pure Mathematics
- GCE AS and Advanced Further Mathematics
- GCE AS Further Mathematics (Additional)
- GCE AS and Advanced Engineering
- GCE AS and Advanced Business
- BTEC Firsts and Nationals in Engineering
- BTEC Firsts and Nationals in Business

Numeracy Basic Skills and Functional Skills

In addition to GCSE Mathematics, Edexcel also offer further opportunities to you and your students.

Our Numeracy Basic Skills qualification (National Test) links directly to GCSE Mathematics content. This allows you to recognise students' ability at all levels and enables students to gain essential employability skills. It also helps to increase motivation and recognises students' additional learning achievements in acquiring the GCSE qualification.

This can therefore lead to greater success in achieving GCSE Mathematics qualifications.

Numeracy Basic Skills onscreen assessment can help you to prepare your centre and your staff for functional maths. Piloting for functional maths will begin in September 2007 and will involve all successful Gateway centres.

Edexcel is piloting an e-assessment solution, which is likely to reflect the;

- planning
- delivery
- and assessment

inherent in Numeracy Basic Skills.

Numeracy Basic Skills qualifications

Level 1 numeracy qualification

GCSE D-G

Numeracy basic skills \equiv 0.5 GCSE

Level 2 numeracy qualification

GCSE A*-C

Numeracy basic skills \equiv 0.5 GCSE

Achievement and attainment points

Level 1 numeracy qualification

Short courses GCSE

Grade E = 14 points

Grade F = 11 points

Numeracy basic skills = 12.5 points

Level 2 numeracy qualification

Short courses GCSE

Grade B = 23 points

Numeracy basic skills = 23 points

Find out more

Integrated electronic support

From September 2007, there will be an electronic version of the GCSE Maths specifications. Within the specifications, for individual topics there will be links to the relevant teacher support materials including:

- schemes of work
- exemplifications
- specimen papers
- ICT guide.

This will allow you to tackle each topic faster and more efficiently, because we will have pulled it all together for you electronically. This will be available in addition to your complete hard copy of the support pack. The electronic specification will be an invaluable resource for teachers using GCSE Mathematics from Edexcel.

The GCSE Mathematics Support Pack contains:

- Linear and modular specifications and e-specifications
- Specimen papers
- Schemes of work for 1 year and 2 year programmes
- ICT guide
- FAQs

Events

We hold specialist mathematics connect meetings across the country where you can find out more about the GCSE Mathematics specifications, and see samples of our support and guidance materials.

Any other questions?

For any other information on the GCSE Mathematics curriculum, email us at gcsemaths@edexcel.org.uk or call our dedicated telephone line on **0870 240 9818**.

You can order further copies of this brochure from Edexcel publications. Call **01623 467467** or fax **01623 450481** and quote the order code Z018842.

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About Edexcel

Edexcel, a Pearson company, is the UK's largest awarding body offering academic and vocational qualifications and testing to more than 25,000 schools, colleges, employers and other places of learning here and in over 100 countries worldwide. Our qualifications include GCSE, AS and A Level, GNVQ, NVQ and the BTEC suite of vocational qualifications from entry level to BTEC Higher National Diplomas and Foundation Degrees.

We deliver 9.4 million exam scripts each year, with over 3.8 million marked onscreen in 2006. As part of Pearson, Edexcel has been able to invest in cutting-edge technology that has revolutionised the examinations system, this includes the ability to provide detailed performance data to teachers.

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