

GCSE Maths

The right formula for success

# Teachers' guide

# About Edexcel

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

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:

- A dedicated support telephone line (from September 2006)
- Teacher resources including detailed topic/module plans and endorsed textbooks
- Edexcel Results Analysis Service that analyses and benchmarks student performance at candidate and question level
- Edexcel published teacher and student material eg Data Handling Tool, Exam Wizard and Exam Tutor
- Launch meetings and training events across the country
- Regional offices around the UK that provide local support
- Regular updates on our website [www.edexcel.org.uk/gcsemaths](http://www.edexcel.org.uk/gcsemaths).

## Reasons to choose **Edexcel**

Our aim is for our website to allow teachers the opportunity to learn from each other and develop best practice. All material posted online is checked for quality by Edexcel. To find out more visit [www.edexcel.org.uk/gcsemaths](http://www.edexcel.org.uk/gcsemaths)

### **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 coursework tasks and projects 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 teaching and assessment guidance, guides on ICT, coursework and 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. 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.

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

### **A maths community**

On our website, we have a new secure area where teachers using Edexcel GCSE Mathematics can access to various guidance, assessment and support materials. It is like an e-library containing exercises, work schemes, model answers, coursework ideas and end-of-term activities for both the linear and modular courses. Materials are available in PDF and word formats.

### **Sources of help**

We provide additional sources of help for anyone who needs further guidance. From September 2006 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 internal assessment

There are two parts to internal assessment – a project testing AO4 (data handling) and a task testing AO1 (using and applying mathematics) in the context of AO2 (number and algebra) and AO3 (shape, space and measures). Coursework is marked by the teacher and externally moderated by Edexcel.

### Linear structure

- 80% external examination assessment (calculator and non-calculator papers)
- 20% internal coursework assessment (10% project and 10% task)

### Modular structure

- 30% external assessment consisting of:
  - 10% Data Handling modular test and 20% Algebra, Number Shape and Space modular test (containing both calculator and non-calculator sections)
- 50% external examination assessment Algebra, Number Shape and Space (calculator and non-calculator papers)
- 20% internal coursework assessment (10% project and 10% task)

# 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

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 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

### GCSE Mathematics CD-Rom

There will be two GCSE Mathematics CD-Roms available. One will be the 'GCSE Mathematics Information' CD-Rom, available to all centres and interested parties. This will contain the two specifications, sample specimen papers, a presentation and video. The second 'GCSE Mathematics Support' CD-Rom will be available to all centres delivering Edexcel GCSE Mathematics. This will contain the same information as the information CD-Rom plus all support materials and access to updates through the secure section of the website. It will be a useful resource for teachers using GCSE Mathematics from Edexcel.

### The GCSE Mathematics Support CD-Rom contains:

- Linear and modular specifications
- Specimen papers
- Coursework guides
- Schemes of work
- ICT guide
- Task, projects and assessment guides
- FAQs

### Events

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

To find out about your nearest launch meeting, visit [www.edexcel.org.uk/gcsemaths](http://www.edexcel.org.uk/gcsemaths).

### Any other questions?

For any other information on the GCSE Mathematics curriculum, email us on [gcsemaths@edexcel.org.uk](mailto: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 Z017350.

**Contact us**

Edexcel  
190 High Holborn  
London WC1V 7BH

Telephone 0870 240 9800  
Minicom 0870 240 3941  
Fax 020 7404 0520  
Email [gcsemaths@edexcel.org.uk](mailto:gcsemaths@edexcel.org.uk)  
[www.edexcel.org.uk/gcsemaths](http://www.edexcel.org.uk/gcsemaths)

**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. We deliver 9.4 million exam scripts each year, with 3 million marked onscreen in 2005. 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 also manage the data collection, marking and distribution of the National Curriculum Tests at Key Stages 2 and 3, and the Year 7 Progress Tests.

©Edexcel 2005.

Registered in England and Wales No. 4496750.