

We listen. We think. We act.

At Cambridge University Press, we are driven by a simple goal: to create resources for teachers and students to ignite a curiosity and love for learning. As England enters a new educational chapter, we are publishing a comprehensive suite of blended print and digital resources matched specifically to the new Key Stage 4 curriculum in mathematics, available from early 2015.

Written by an experienced author team of teachers, partners and advisers, our mathematics resources have a strong focus on the development of problem-solving skills, fluency and mathematical reasoning. With progression at the heart, we provide the tools for students to become independent learners, encouraging them to understand the relevance of mathematics in the real world by demonstrating its application, purpose and context. Simple and affordable, our bespoke content builds on Key Stage 3 knowledge and supports navigation and delivery of the new subject content and assessment objectives.

Content is available through our digital subscription service GCSE Mathematics Online

FOR THE STUDENT:

GCSE Mathematics Online

A tablet-friendly enhanced digital learning, teaching and assessment resource for teachers and students, for both Foundation and Higher tiers. With progress at its heart, it includes lesson notes, worksheets, animated tutorials and walk-throughs to stretch and support students, as well as quiz banks and tests to assess knowledge and report on progress.

GCSE Mathematics Online Bundle

An inclusive package of our print Student Book and GCSE Mathematics Online, for both Foundation and Higher tiers. The resource covers the full qualification and has a strong focus on the development of problem-solving skills, fluency and mathematical reasoning.

Problem-solving Books

Higher and Foundation tier Problem-solving Books containing a variety of questions for students to develop their problem-solving and reasoning skills. Supplementing the problem-solving content in the Student Book, these resources will stretch the more able and support those who need it.

GCSE Mathematics Assessment and Progress Tracker

Mapped to the Student Books, this tool is suitable for classwork, homework and revision as well as both summative and formative assessment. It provides detailed reporting on individual and class results and will aid in monitoring and tracking student progress.

COMING SOON

Homework Book

Affordable standalone resources and ideal companions to our Student Books. Our Higher and Foundation tier Homework Books offer a further set of questions for practice and consolidation and cover a variety of skills, including problem-solving and mathematical reasoning.

FOR THE TEACHER:

Teacher's Resource

Everything necessary for teachers to plan and deliver the subject specification. Our free digital Teacher's Resource includes advice on common misconceptions, hooks to engage students in topics, additional stretch and challenge opportunities and much more.

Available FREE

Register your details for regular updates and more information:

www.cambridge.org/ukschools

E: ukschools@cambridge.org

T: 01223 325 588

GCSE MATHEMATICS

What you need to know



GCSE Mathematics. What you need to know.

Our table below details the key changes to the new GCSE Mathematics, for first examination from 2017, and how our new resources will support the teaching and learning of these qualifications.

	Key curriculum changes	Implications for maths teachers	Our solutions
Progress measures	<p>Grading, progress tracking and accountability.</p> <ul style="list-style-type: none"> New grading system from 1-9. Progress 8: <ul style="list-style-type: none"> - new accountability progression measures in 8 subjects - maths double weighted in school league tables. No national curriculum levels. 	<ul style="list-style-type: none"> A new and unfamiliar grading system. Predicting and understanding what grades mean may be more difficult. With no national curriculum levels or modular exams, teachers may have to re-think how they assess, monitor and track progress. 	<p>▶ GCSE Mathematics Online</p> <ul style="list-style-type: none"> Includes a range of differentiated preset quizzes and a test generator so teachers can compile their own assessments. Inbuilt reporting allows teachers to track students' work and progression, so areas of strength and weakness can be easily identified. Allows teachers to create and set tasks for lessons, auto-mark, report on tests and homework and review student performance. <p>▶ GCSE Mathematics Assessment and Progress Tracker</p> <ul style="list-style-type: none"> Includes extensive reporting on individual and class results to aid in assessing, monitoring and tracking student progress.
Content changes	<ul style="list-style-type: none"> Increase of approximately 15% in subject content. Changes in content include: <ul style="list-style-type: none"> - material from the Higher paper moving down to the Foundation paper - more demanding material in the Higher paper, which has moved down from A Level - brand new content and topics in both Higher and Foundation papers. 	<ul style="list-style-type: none"> Suggested increase in extra teaching time. Teaching may become more challenging with more demanding content to be taught, including new topics that some teachers won't have taught before. 	<p>▶ Free Teacher's Resource</p> <ul style="list-style-type: none"> Provides teaching ideas and advice to support teachers in their planning and delivery of the course. Includes ideas of how to introduce topics, how to make the most of questions in the Student Books and how to extend or amend for their students. Includes guidance on how to use and extend investigations and questions in the Student Books. Is a combined Higher and Foundation tier resource so teachers have full coverage of both.
Exam structure	<ul style="list-style-type: none"> Fully linear course. No November re-sits until post-16. Only the first exam sitting will count towards the school league tables. 	<ul style="list-style-type: none"> Tracking students' progression may be more difficult. Teaching style may need to be altered. Instead of teaching in distinct sections for modules, there will be a cumulative build up to the final exams. 	<p>▶ Brand new resources</p> <ul style="list-style-type: none"> Brand new bespoke material, written specifically developed for the new linear qualifications. Resources include full coverage of the new GCSE specifications and support delivery of new GCSE content and assessment objectives. Progress is at the heart of our resources, with progress tracking tools to help teachers monitor student progress. Links are formed between different topics via cross-topic questions in our Student Books and Problem-solving Books, as well as advice in our Teacher's Resources, while exam-style questions prepare students for assessment. Resources developed to be mature enough for use by sixth form students, if they require them. <p>▶ Student Books</p> <ul style="list-style-type: none"> Progress focused. Includes a <i>Launchpad</i> feature at the beginning of each chapter to help students find their appropriate starting point, to optimise progress and promote independent learning.
Assessment objectives	<ul style="list-style-type: none"> Greater emphasis on problem-solving and reasoning skills, especially at Higher tier, with more weighting now on the new AO2 and AO3, which have revised content from the current AO2 and AO3. 	<ul style="list-style-type: none"> Additional preparation and teaching may be required. 	<ul style="list-style-type: none"> Problem-solving and reasoning skills embedded throughout our resources. <p>▶ Problem-solving Books</p> <ul style="list-style-type: none"> A variety of questions for students to extend their work on problem-solving strategies and expose them to different types of problems in different contexts. Broad questions with commentaries help students develop the skills needed to effectively solve problems including reasoning, interpreting, estimating and communication skills which now have greater emphasis in the new AO2 and AO3. <p>▶ Student Books</p> <ul style="list-style-type: none"> A strong focus on the development of problem-solving skills, fluency and mathematical reasoning will help students understand concepts, apply techniques, solve problems, reason, interpret and communicate mathematically. Problem-solving content is presented within a framework so that students build up the skills and techniques required to answer further problem-solving questions without assistance.
Support	<ul style="list-style-type: none"> National Maths Hubs set up to provide schools and colleges with locally-tailored and quality support in all areas of maths teaching and learning. 	<ul style="list-style-type: none"> Teachers have more varied access to support and advice. 	<p>▶ CPD training and partnerships</p> <ul style="list-style-type: none"> Cambridge University Press will be offering CPD training from 2015 onwards in collaboration with NRICH, an organisation that provides support for both teachers and learners of maths. Available nationwide during the 2015 summer term and delivered by NRICH, our CPD training will address the content of the new GCSE curriculum and focus on key areas including problem-solving, reasoning and fluency.