Second Edition

Maths Progress

Your guide to our KS3 maths course



pearsonschools.co.uk/ mathsprogress



Key Stage 3 Maths has evolved, so our resources have too

We want every student to engage with the power of maths so they can develop the skills and confidence to achieve and progress throughout their lives.

That's why Maths Progress (Second Edition) has been built on our well-loved 2014 course, your feedback and the latest research to engage your Key Stage 3 students, boost their mathematical confidence and give them the best preparation for GCSE study and beyond.



Focus on skills-building

and practice





Why choose Maths Progress? Pages 28-31



What's behind the evolution?

The Maths Progress course has been purposefully updated to support you and your students with making the most of Key Stage 3 maths and preparing for their next steps.



to shape a course with more of what you love ...

- Helping KS3 students master maths with confidence with an established, UK-specific approach that draws upon global best practices and cutting-edge research
- Tried-and-tested differentiation with a unique unit structure to support every student's progress
- **Consistency across 11–16** through seamless alignment with our GCSE Maths courses

and to take it even further...

- A well-paced and structured Core Curriculum, creating a connected pathway you can use with your whole cohort
- Updated textbooks and digital services that work together to give the across KS3 and on to GCSE
- Extra skills-building support and practice to consolidate learning, deepen understanding and forge connections between topics
- Updated and appropriately levelled assessments that reflect the latest exams to ease and bolster students' progression to GCSE



• Focus on confidence, progression, problem-solving and fluency

fullest support for planning, teaching, assessing and progress-tracking

The series at a glance

There's no one 'right' way to teach maths. That's why Maths Progress (Second Edition) has several components that you can choose and use to create the course that works best for you and your students.

Textbooks with tried-and-tested differentiation



Core Textbooks - for your whole cohort



strengthening skills and knowledge



– extending skills and knowledge





Purposeful Practice Books – a different kind of practice book



Level Up Maths: Access workbooks -Additional support for KS2 to KS3 transition



resources, and start a free trial online at: pearsonschools.co.uk/mathsprogress Explore free samples,



A unique approach to boosting students' mathematical confidence

Every student can be a confident mathematician.

That's why the Maths Progress series is specifically founded on key principles to nurture students' confidence in maths so they can believe it too.

And if they can believe it, they can persevere, achieve, and progress.



And the approach works...

From what teachers, students and research studies have told us, we've seen that the Maths Progress series has helped students' confidence in maths grow across the world.

~

Students do say 'I like maths' a lot more than they used to. Maths Progress has obviously contributed to that.

- Head of Maths*

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"

Everyone can have a go, it doesn't matter if you a make a mistake. There is that environment that's been created and I would say these resources have helped do that.

- Maths Teacher Hamstead Hall Academy

My confidence has grown. - Year 8 Student*



Effectiveness of **KS3 Maths Progress** highlighted by an independent research study with the Institute of Education, UCL

> * Quotations from the independent research study with the Institute of Education, UCL about the effectiveness of KS3 Maths Progress

The Core Curriculum your whole cohort can use

To help every student become a confident mathematician, Maths Progress (Second Edition) is built on a well-paced Core Curriculum, creating a connected pathway that all your students can follow.



Sequenced to ensure topics and concepts are revisited and built upon throughout KS3, to embed conceptual understanding and develop problem-solving skills

- Accessible starting points for every lesson to boost confidence and identify misconceptions early
- Consistent and accurate use of mathematical language and explanations, to give students the vocabulary they need to reason mathematically
- Built-in differentiation enables all students to work on the same topic at the same time, so you have the flexibility to use it with sets or mixed-ability classes



Fully aligned Core, Support and Depth books, with online and printable homework activities to help students build understanding at the level that's right for them

A free interactive scheme of work brings together teacher guidance, resources and paid-for assessments all in one place, to help plan the most effective lessons

How it works

The Core Textbooks and Active Learn materials are designed for every class to use.

Core Textbooks – for your whole cohort

Based on a single, well-paced curriculum with built-in differentiation. fluency, problem-solving and reasoning so you can use them with your whole cohort. They follow the unique unit structure that's been shown to boost confidence and support every student's progress.

Aligned Support and Depth materials enable students to work at the level that's right for them.

Support Books strengthening skills and knowledge

Provide extra scaffolding and support on key concepts for each lesson in the core curriculum, giving students the mathematical foundations they need to progress with confidence.

Depth Books – extending skills and knowledge

Deepen students' understanding of key concepts, and build problem-solving skills for each lesson in the core curriculum so students can explore key concepts to their fullest.

Tried-and-tested differentiation to support every student

To help your Key Stage 3 students progress and master maths with confidence, differentiation is embedded within the structure of each unit in the Core Textbooks.



Unique UK-specific approach

- Draws on global best practice and cutting-edge research
- Effectiveness evaluated in a study with the Institute of Education, UCL
- Aligns seamlessly with our GCSE resources for a consistent 11-16 experience
- Enables students to personalise their learning

How it works...



The resources help me check my progress so I can look back and see how far I've come. It also allows me to simplify the question if I don't understand it the first time.





You can use the Support and Depth Books at any point throughout the unit. They're designed to give the right level of support and additional problem-solving content to help strengthen students' understanding of key concepts.

There is that clear structure embedded within each topic. and as a result the lessons have the questions building from basic skill to really advanced skill[s]. But they are open-ended - there are so many different approaches you can take.

- Maths Teacher*

In areas where they have yet to develop

"

test to determine their



⁻ Student*

^{*} Quotations from the independent research study with the Institute of Education, UCL about the effectiveness of KS3 Maths Progress

A closer look at the Core Textbook unit structure

Master



Strengthen

Master p26 Chec 2 Strengther	k up p48 Str	engthen	Extend p55 Unit test p57
Written metho	ds		
1 Work out these ca a HTO 458 +214 -2 c 348 + 491 f 164 + 52	lculations. The first two b 726 +238 d 223 + 585 g 75 + 139	 e 2438 + 192 h 642 + 4389 	Q1a hint Write 1 ten in the Tens column. Q1f hint Line up the Hundreds, Tens and Ones.
2 Work out these ca a H T O 5 ³ 4 ² - 1 2 3 - 9	lculations. The first two b 974 <u>- 526</u> <u></u>	have been started for	r you. Q2a hint Use 1 ten from the Tens column to make 12 ones.
c 346 - 182 f 764 - 493	d 925 – 671 g 3495 –1523	e 518 – 236 6822 – 351	

Extend

Master p26 Check up p48 Strengthen p50 Unit test p57 Master p26 Check up Extend 2 Extend 2 Unit test 1 a Work out 1 Round 2486 005 to the $i (4+4) \div (4+4)$ ii $(4 \times 4) \div (4 + 4)$ iii $(4 + 4 + 4) \div 4$ iv $4 \times (4 - 4) + 4$ 2 Work out 1063 - 297 **v** $(4 \times 4 + 4) \div 4$ **vi** 4 + (4 + 4) ÷ 4 **b** What do you notice about your answers to part **a**? 3 Work out c Reasoning How could you use four 4s to make 7? ... to make 8? **a** 82 × 6 2 a Which of these numbers are square numbers? **b** 371 × 62 123 169 101 144 230 b Reasoning Gwynfor says, 'There is no square number between 122 and 140.' 4 Work out Is he correct? **a** 168 ÷ 8 **b** 8473 ÷ 13 3 Problem-solving / Reasoning Q3 hint You need to take leap 1 September 2010 was a Wednesday. years into account. 5 A weather chart shows 1 September 2011 was a Thursday. When will 1 September next fall on a Wednesday? 5°C, -1 °C, 3°C, -4 4 Problem-solving / Reasoning Seating arrangements need to be made for 42 girls and 36 a Which is the warmest boys attending a school prom. All tables need to have the same number of girls. All tables b Is 0°C colder or warn me number of hove need to have

resources, and start a free trial online at: pearsonschools.co.uk/mathsprogress Explore free samples, *Active* Learn

k up	Strengthen p50	Extend p55	Unit test p57
ions. eck your answer. • 431 <u>+ 289</u> I your answer. ions.	c 8329 <u>- 6645</u>	d 4137 – 82	
b 28 × 34	c 419 ÷ 19		
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Check up

Unit test

8 Strengthen p50	Extend	p55	Unit test	
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4°C, 0°C, −5°C				
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Focus on skills-building and practice in the classroom

Teachers and students told us that they want more opportunities to practise and build skills.

That's why Maths Progress has more meaningful practice built in across our books and ActiveLearn than ever before. Active Learn Over 500 editable and printable homework worksheets linked to each lesson and differentiated to the Core, Support and Depth strands

Active Learn 2,500+ auto-marked online homework activities



Explore free samples, [ActiveLearn | resources, and start a free trial online at pearsonschools.co.uk/mathsprogress

Clear **problem-solving** practice

Active Learn Teacher-to-teacher guidance videos on topic points, misconceptions and teaching approaches

Guidance for students, including worked examples, key points, hints and videos also available on ActiveLeam

Active Learn Handy features such as 'zoom' areas and 'playlist' tools make it easier to customise and use the resources during each lesson.

Focus on skills-building and practice out of the classroom

To help create a seamless learning experience for students, Our ActiveLearn service gives online access to Maths Progress resources making them easy to use for independent study and homework.





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Purposeful Practice Books and ActiveBooks

A different kind of maths practice book developed with UK teachers and based on cutting-edge approaches to help students make the most of practice.

Each of our Key Stage 3 books has over 3,750 questions using minimal variation that:

- while the second steps to consolidate knowledge and boost confidence
- help every student put their learning into practice in different ways
- are fully aligned to the Core Textbooks

Try ActiveLearn for free at: pearsonschools.co.uk/mathsprogress

*Quotations from the independent research study with the Institute of Education. UCL about the effectiveness of KS3 Maths Progress

The use of ActiveLearn for their independent learning resources at home has been really beneficial ... ultimately that is saving time in a working day for a teacher.

Maths Teacher, Hamstead Hall Academy

focus on strengthening skills and strategies, such as problem-solving

give students a strong preparation for progressing to GCSE study.

Supporting transition from primary to secondary

Level Up Maths: Access workbooks have been designed to make students' transition from Key Stage 2 to Key Stage 3 less daunting and smoother. By covering the skills and knowledge from Key Stage 2, students can build the skills, knowledge and confidence needed to access and master the Maths Progress/Key Stage 3 maths curriculum.







The Access to Key Stage 3: mapping

helps teachers to understand the skills and concepts pupils have mastered in primary school using the **NCETM ready-to-progress criteria**. This allows teachers to provide a

continuous approach to teaching maths, ensuring your cohort get the best preparation for progressing to GCSE and beyond.



Mapped to the **DfE's NCETM** ready-to-progress criteria.

Engage lower attainers with fun activities.



Learn more at: pearsonschools.co.uk/mathsprogress

Tried and tested by 100,000s of students for over 10 years as part of the Level Up series.



Bolstering progression across KS3 and beyond

From free materials and in-built progression and tests throughout the books to the Progress & Assess suite in Active Learn, every element of Maths Progress (Second Edition) is designed to help your students progress with confidence.

"

The students' confidence is improving from where it was. Part of that is that they are being challenged a lot more... KS3 Maths Progress has developed them a lot.

- Head of Maths*

It prepares them and gives them a brief insight into what the GCSE will be like.

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- Head of Maths*

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If I get stuck I'm like 'this question isn't going to beat me'... I'll just try and think of a way around it. And it just makes me want to finish the question a little bit more.

– Year 7 Student*

How Maths Progress (Second Edition) does this...

- Free Editable interactive scheme of work for Maths Progress (Second Edition)
- scheme of work
- **In-built progression** with recaps, progress checks and questions throughout the books - including 'Challenge' and 'Reflect' sections and Unit tests
- **Differentiated pathways** with Support and Depth materials help students strengthen or extend their skills and understanding

Plus...

The fullest KS3 maths progression and assessment suite available with ActiveLearn Progress & Assess.

See more overleaf *r*

* Quotations from the independent research study with the Institute of Education, UCL about the effectiveness of KS3 Maths Progress

Free Editable interactive scheme of work for 11–16 maths that's linked to the official Pearson Edexcel GCSE (9–1) Mathematics

Free KS3 and KS4 baseline tests so you can assess each student's starting point at the beginning of Year 7 and the end of Year 9



Bolstering progression across KS3 and beyond

Maths Progress (Second Edition) also has a whole suite of progression tools and materials on *ActiveLearn* making it the only KS3 maths series to have fully aligned, high-quality assessments with accurate built-in data reporting and a GCSE-ready approach.

How ActiveLearn Progress & Assess works...

- **Designed to suit your needs**, the suite can support your existing progress-tracking methods or provide a complete solution
- Aligns with resources across Key Stages 3–5 so you can consistently track progress in maths and other subjects across your school
- **30 pre-unit activities**, including games, recaps and knowledge organisers
- 96 KS3 assessments, including baseline, end-of-unit, end-of-term and end-of year tests
- Separate calculator and non-calculator papers with mark schemes, online markbooks and indicative GCSE (9–1) grades
- An optional Assessment Builder tool enables you to create your own assessments based on Maths Progress questions

Note: This service is included as part of a full ActiveLearn subscription or is available as a separate Progress & Assess subscription.

ActiveLearn for free at: pearsonschools.co.uk/mathsprogress

Our **two-tier assessment model** includes 60% common questions from Core materials.

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A		Accuracy mark - unless the o	question s	pecifies that working must be shown then	
		the sight of the correct answ	er implie	s the award of full marks (unless the	
		answer clearly comes from incorrect working)			
c		Communication mark			
Р		Process mark to show correct	t process	for problem solving. Any other process of	
	a similar standard to achieve		an accur	ate result is acceptable to achieve this	
		mark			
FT		Incorrect values may be followed through from one step to the next provided that the correct method is seen in each step and the only errors are arithmetic			
		This is shown in mark schem	es by put	ting a number in inverted commas	
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Online markbooks track students' strengths and weaknesses, so you can see if individual or whole-class interventions are needed.

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Mark schemes provide clear marking guidance

> **Indicative 9–1 grades** in online markbooks are based on student results, relative to their stage of learning.

2018						
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y assessments (9)						
se t 🔞 🎽	Assessment Progress 😧	10/01/2019 <u>KS3 Maths</u> <u>Progress</u> Baseline Test	08/11/2018 <u>Pi 1 Autumn</u> <u>Half-term</u> Test			
		3	2			
		2	2			
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A RAG (red, amber, green) status is given for each assessment so you can see at a glance how students are doing per question, per assessment and per target.

Supporting 5–19 Progression

We believe that everyone should have the opportunity to enjoy exploring maths.

That's why all our Pearson resources, including Maths Progress (Second Édition), work together to help you equip your students with what they need to progress and take their next steps with confidence.

Levels

Level

MATHS

Aligned learning approaches

Primary

Hundreds of primary schools now adopt a mastery-led curriculum. Maths Progress is built on mastery principles, so students have a continuous approach from primary through to Key Stage 3.

Boosting confidence

Maths Progress is founded on key principles to ensure that students can master Key Stage 3 maths with confidence, in readiness for their next steps.

Pearson Edexcel GCSE (9-1 **Mathematics**

Easing the transition from Key Stage 2 to Key Stage 3

Bridge any gaps between primary and secondary, without losing engagement with Level Up Maths: Access workbooks.



Maths Progress

Secondary

Building key skills for GCSE and beyond

Maths Progress embeds and signposts synoptic links and problem-solving skills – vital for further study and the future.

Learn more at **pearsonschools.co.uk**

Smoothing the transition to next steps

With KS3-appropriate GCSE-style questions, Maths Progress familiarises students gets familiar with what they'll see in later years.



Year 1/AS

Pure Mathematics

Consistency across the curriculum

Our resources follow similar formats and approaches to give a consistent teaching, learning and reporting experience.

Like what you've seen? Explore more online!

This guide gives a snapshot of Maths Progress (Second Edition), but there's more to see online. Simply visit pearsonschools.co.uk/mathsprogressonline to see the bigger picture of what the course has to offer with a 30-day free trial of ActiveLearn

Try







Comprehensive digital service including planning, delivery and homework-setting through ActiveLearn.

Textbooks and digital services that work together for planning, teaching and progress tracking from KS2, across KS3 and on to GCSE.

Supporting transition from primary to secondary in Maths.

Level Up Maths: Access workbooks help students build the skills and knowledge from Key Stage 2 needed to access and master the Maths Progress maths curriculum. Bolster students' progression to GCSE with a format that seamlessly aligns with our GCSE Maths resources.

Appropriately levelled questions and updated assessments that reflect the latest GCSE (9–1) exams plus <u>5-year Schemes of Work</u>.





Shown to help KS3 students master maths with confidence with an established, UK-specific approach that draws upon global best practices and cutting-edge research.

Builds on the results of an independent research study we conducted with the Institute of Education, UCL. You can read the full efficacy report on our <u>Tried,</u> <u>Tested, Trusted webpage.</u>

Underpinned by ten evidence-based principles of building confidence in maths. You can read more about the pedagogy behind the series on our **Confidence for all webpage**.

Like what you've seen? Explore more online!

A tried-and-tested differentiation approach that supports every student's progress. Our unique unit structure has been used by 100,000s of students.

How it works



Flexibility to create the course that works best for you, and all of your students.

Core Textbooks follow a single, well-paced curriculum with built-in differentiation, fluency, problem-solving and reasoning so you can use them with your whole cohort.

Support and Depth to be used in addition to Core when needed for extra scaffolding and support or to extend students' understanding of key concepts.





Core textbooks - for your whole cohort



Support Books

- strengthening skills and knowledge

their learning:

extend their learning.



Purposeful Practice Books - a brand-new kind of practice book





feel confident, they can choose to

Test

Finally, students do a test to determine their progression across the unit.



Depth Books - extending skills and knowledge







Level Up Maths: Access workbooks – supporting transition from primary to secondary

What next?

If you like what you've seen, visit pearsonschools.co.uk/mathsprogress to:



Sign up for a 30-day free trial



Iet us know you'd like to chat with us about the course



buy the resources online.

pearsonschools.co.uk/mathsprogress