“Since launching the programme, maths is now a key strength in our school. Visitors are blown away when they see the enthusiasm and engagement of pupils. Crucially, the emphasis on reasoning and language has raised the bar in other curriculum subjects. We now apply many of the principles elsewhere across the school.”

MICHELLE THOMAS, EXECUTIVE HEADTEACHER AT THE NEW WAVE FOUNDATION

About us

Our not-for-profit school improvement programme empowers and equips teachers to improve pupils’ enjoyment, understanding and attainment in maths.

Mathematics Mastery is research-based and specifically designed for UK classrooms by Dr Helen Drury and a team of experts.

The programme includes five integrated components, which work together to build specialist expertise, develop teachers, improve maths lessons and drive change.

If you want to improve maths provision in your primary school, email us at partnerships@mathematics mastery.org. We’d love to hear from you.
Why join us

TEACH MATHS WITH CONFIDENCE
A structured programme of maths-focused professional development and high-quality curriculum resources will empower and equip you to give your pupils a world-class maths education.

FEEL SUPPORTED
We’re with you every step of the way. From pre-launch induction training to an open phone line and regular school visits from your assigned Development Lead, it’s a partnership.

INCREASE STUDENT ENJOYMENT AND ATTAINMENT
Research among our network of more than 500 schools shows our approach is working. 92% of school leaders say that Mathematics Mastery has had a positive impact on pupil progress.

BE PART OF A NATIONAL NETWORK
Meet like-minded professionals. Collaborate at maths-focused workshops, networking events and professional development sessions to learn from others and share your experience.

LONG-TERM, SYSTEMIC CHANGE
Mathematics Mastery is not a bolt-on service. You invest in us and we invest in you. Together, we enable systemic, long-term change to happen from within.

COHERENT CURRICULUM
Mathematics Mastery schools implement an ambitious, coherently planned and carefully sequenced curriculum.

But don’t take our word for it:

I feel more confident in my role and am proud of what we have achieved so far as a school. The reassurance that I’m doing the right thing is really appreciated.

HARRIET PILSWORTH, TEACHER AT PLACE FARM PRIMARY SCHOOL

My teachers spend a lot of time collaborating with each other but also with the wider Mathematics Mastery community. I really believe this network has had a huge impact on successful maths teaching.

DAMIAN MCBEATH, HEADTEACHER AT ARK CONWAY PRIMARY SCHOOL

At the end of Key Stage 1, the percentage of our children reaching expected level had always been in the high- to mid-70s. However, with our first Mathematics Mastery cohort, this figure was 90 per cent. Moreover, 37 per cent of these pupils were working at greater depth – a 20 per cent increase since they left Reception.

JODIE WALLACE, MATHEMATICS LEAD, THORNABY CHURCH OF ENGLAND PRIMARY SCHOOL

In 2017, Ofsted graded our school ‘Outstanding’ with inspectors commenting “Teaching enables pupils to master and gain a deep understanding of new skills and concepts in mathematics”.

TOM GARRY, DEPUTY HEADTEACHER AT ANGEL OAK ACADEMY
Our principles

While our programme content evolves each year, the ethos behind it remains the same. The principles are interconnected and grounded in world-leading educational research.

SUCCESS FOR ALL
Every child can enjoy and succeed in mathematics as long as they are given the appropriate learning opportunities. A growth mindset enables pupils to develop resilience and confidence.

DEEPER UNDERSTANDING
Pupils must be given time and opportunities to fully explore mathematical concepts. The challenge comes from investigating ideas in new and complex ways – rather than accelerating through new topics.

PROBLEM-SOLVING
Enabling learners to solve new problems in unfamiliar contexts is the ultimate aim of mathematics education. Identifying, applying and connecting ideas enables pupils to tackle new and more complex problems.

MATHEMATICAL THINKING
Successful mathematicians are known to develop mathematical ‘habits of mind’. To encourage this, we must support pupils to be systematic, generalise and seek out patterns. Questioning is a key element of this.

MATHEMATICAL LANGUAGE
Mathematical language strengthens conceptual understanding by enabling pupils to explain and reason. This must be carefully introduced and reinforced through frequent discussion to ensure it is meaningfully understood.

MULTIPLE REPRESENTATIONS
Objects, pictures, numbers and symbols enable pupils to represent ideas and make connections in different ways. This develops understanding and problem-solving skills – whilst making lessons engaging and fun.
What the experts say

Our studies show that teaching people to have a growth mindset, which encourages a focus on effort rather than on intelligence or talent, helps make them into high achievers in school and in life.

CAROL DWECK, PROFESSOR OF PSYCHOLOGY, STANFORD UNIVERSITY

We know that learning mathematics is more powerful, deeper and longer lasting when children make connections between different mathematical ideas.

MIKE ASKEW, PROFESSOR OF MATHEMATICS EDUCATION, WITS UNIVERSITY

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. Pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

NATIONAL CURRICULUM 2014

To learn mathematics effectively, pupils need to talk about their mathematical ideas, negotiate meanings, discuss ideas and strategies and make mathematical language their own.

CLARE LEE, LANGUAGE FOR LEARNING MATHEMATICS, 2006

Pupils who use concrete materials develop more precise and more comprehensive mental representations, they often show more motivation and on task behaviours, understand mathematical ideas and better apply these to life situations.

TERRY ANSTROM, SUPPORTING STUDENTS IN MATHEMATICS THROUGH THE USE OF MANIPULATIVES
Our impact

We want all pupils to achieve. But when looking at the impact of our programme, we believe it’s important to look beyond test scores.

We look at levels of student enjoyment, understanding and attainment in mathematics, as well as how the programme is developing teacher practice.

As a result of consistently high-quality teaching materials and comprehensive professional development for teachers in primary and secondary schools, more than 200,000 students are better equipped to solve problems and achieve more.

Our results

An Education Endowment Foundation trial found that pupils using the Mathematics Mastery programme for one year made an additional one month of progress compared to other pupils.

The average Key Stage 2 SATs score in a Mathematics Mastery school in 2018 was 2 points higher than the national average. This success comes despite over 45% of pupils in Mathematics Mastery schools being classified as ‘disadvantaged’.

What school leaders tell us:

• 92% say the Mathematics Mastery has had a positive impact on pupil progress.
• 96% say the programme has deepened pupils’ understanding of mathematical concepts.
• 98% say pupils enjoy maths lessons.
• 95% say the programme has improved maths teaching in their school.

90% of our Mathematics Mastery School Leaders (MMSLs) say the programme is easy to use, and over three quarters say it is helping to reduce teacher workload in their school.
Professional development

Our offer of continuing professional development integrated with expertly designed, adaptable schemes of work and resources is unique.

LEADERSHIP OF MATHEMATICS COURSE FOR YOUR MATHS LEAD

The Mathematics Mastery programme expands your in-house expertise by enrolling one member of staff onto a one-year long ‘Leadership of Mathematics’ course.

The course focuses on developing subject leadership skills, pedagogical understanding and classroom practice.

Your nominated maths lead is then supported to cascade professional development up and down the school through delivery of whole school workshops on Mathematics Mastery’s key principles as well as workshops to enhance subject knowledge.

The course includes three face-to-face sessions and is supported by guidance and resources throughout the year.

INDUCTION TRAINING FOR TEACHERS

Designed to support everyone who is teaching Mathematics Mastery for the first time.

This comprehensive and collaborative training ensures teachers are equipped with the knowledge, understanding, resources and skills to hit the ground running.

We will develop teachers’ knowledge and leave them confident, inspired and ready to launch the programme.

As you renew the programme over the years, we will make Induction Training available for new members of staff to ensure that each team member can deliver the programme.

MEMBERSHIP OF A NATIONAL PARTNERSHIP

When you join the Mathematics Mastery programme, you are joining a national partnership of schools – all of whom share our mission to transform mathematics education in the UK.

Every year, hundreds of teachers attend the Mathematics Mastery Annual Conference – one of the largest maths education events in the country.

Membership of our national partnership gives you access to a network of like-minded schools.

You can collaborate with other schools, share case studies and best practice, and access the latest thinking on maths teaching.

ONGOING SPECIALIST SUPPORT

Each Mathematics Mastery school is assigned a designated Development Lead who supports you with professional development, additional training and action planning throughout the year; all bespoke and driven by your needs.

Our Development Leads are experienced classroom teachers or senior leaders. They have all been carefully selected and trained as Mathematics Mastery specialists.

Your Development Lead will follow up on launch with a school visit and development sessions to observe, reflect and support you.

They will provide ongoing support and guidance via email and phone to ensure the programme meets the needs of your teachers and pupils.
Our professional development directly supports use of our classroom resources and planning support for ease of use and greatest impact.

Mathematics Mastery lessons are interactive, fast-paced and fun. You’ll receive a curriculum designed by experts and a wide range of materials to support your teaching.

All materials are accessed through the Toolkit, our online programme hub.

**YOU’LL GET:**

**The Mathematics Mastery curriculum:** Schools receive a detailed explanation of the curriculum content units for each year group.

**Curriculum unit tutorial videos:** Short videos explaining the key learning, mathematical language and representations for the curriculum unit ahead.

**Lesson guides:** For 30 weeks of the year, including guidance on key vocabulary, potential misconceptions, differentiation through depth and use of concrete resources.

**Task sheets:** Flexible activities designed to support pupils’ learning, matched to specific lesson guides.

**Interactive whiteboard flipcharts:** Ready-designed and fully adaptable.

**Lesson transitions:** Songs, chants and rhymes, supporting children to recall quick number facts or concepts as they move between lesson segments.

**Maths Meetings:** Daily sessions for teaching and revising mathematical general knowledge, with guidance to support delivery of this core programme component.

**Interventions:** Short daily tasks for pupils who require further support.

**Progression in calculations:** A collection of different calculation strategies to be taught and applied, with supporting video tutorials.

**Big pictures:** Fun images of fairy tales, nursery rhymes, countries and more, to encourage mathematical discussion, demonstrate concepts and link ideas in different ways.

**Suite of optional assessment tools:** A selection of formative assessment tools, including our specially designed ‘Key Constructs’, end of half term and end of year assessments, to support you in tracking pupil progress across the year.
How it works

Mathematics Mastery is a long-term investment and most schools aim to run the programme all the way up to Year 6. Starting with resources for Reception and Year 1, schools roll the programme up one year group at a time each year after launch.

Getting ready for launch

Day 1 of the Leadership of Maths course for your nominated Mathematics Master School Lead (MMSL) and Headteacher.
Induction Training. An essential one-day training course for all teachers who are new to the programme.
An introductory video call from your Mathematics Mastery Development Lead to help you build a bespoke action plan for your school.

Launch

Day 2 of the Leadership of Maths course for your MMSL, with focus on:
• the ‘plan > teach > evaluate’ cycle.
• embedding the Mathematics Mastery principles.
• establishing a culture of professional development at your school.

Support throughout your launch year

The Mathematics Mastery Conference – an annual collaborative event for all MMSLs to share best practice and hear about new research insights.
Two school visits and a development session to give your team support through mentoring, coaching, observation of lessons and action plans.
Day 3 of the Leadership of Maths course for your MMSL, with focus on:
• embedding the feedback framework.
• practical tools for driving change in your team.
Headteacher Celebration Event – an opportunity for senior leadership teams to share their experience of the programme.
Induction Training for new teachers – either for those in year groups that the programme is rolling up to or for those who are new to your school.

What happens after your launch year?

Each year you can roll the programme up into the next year group.
• As you roll the programme up through the years, you will continue to receive one visit and two remote development sessions from your Development Lead across each year.
• Your MMSL can attend the Mathematics Mastery Professional Development Day to look at latest developments and techniques for use as part of the programme.
• Your MMSL will be invited to the annual Mathematics Mastery Conference to hear from leading maths education researchers and fellow MMSLs on best practice.

Don’t forget: Your Development Lead is available throughout the year, whenever needed.

If you want to start the programme mid-year, please contact us and we will work with you to meet your needs.
Join Mathematics Mastery and you’ll become part of a national network

The Mathematics Mastery programme focuses on professional development – increasing the knowledge, understanding and skills of our teachers. It’s an investment worth making for the future of our staff.

CRAIG MCKEE, DEPUTY HEAD OF HILLMORTON PRIMARY SCHOOL, RUGBY, WARWICKSHIRE

I am very thankful to the support we’ve received from our Development Lead, Lisa. I feel more confident in my role and am proud of what we have achieved so far as a school.

HARRIET PILSWORTH, TEACHER AT PLACE FARM PRIMARY, HAVERHILL, SUFFOLK

Mathematics Mastery has transformed maths in this school from Reception to Year 3 – and Year 4 are already making huge gains. I recommend the programme to every teacher I meet.

DEB JOHNSON, ASSISTANT VICE PRINCIPAL AT MERCHANTS’ ACADEMY, BRISTOL

We hear the children demonstrating their depth of understanding and talking about maths in full sentences. We’ve also noticed this approach transferring into other areas of learning.

LAURA DONALDSON, EARLY YEARS AND MATHS LEAD AT MEREDITH INFANT SCHOOL, PORTSMOUTH
When you join the programme, you will be given access to the Mathematics Mastery Toolkit where you will find:

- Complete classroom resources and planning support.
- Comprehensive assessment materials.
- Explanatory and instructional video content.
- Educational research articles.
- Blog posts on latest policy developments.
- The Mathematics Mastery event booking portal.

**Go now to [mathematicsmastery.org](http://mathematicsmastery.org) and click on **Join Us** to get started.**
Maths is a significant area of the curriculum, yet it remains an under-served specialism in most primary schools.

Many teachers are anxious about teaching maths. Lack of subject knowledge – and lack of understanding of what great maths teaching looks like – breeds lack of confidence.

This reflects in the attitude and attainment of pupils, as highlighted by international league tables. And so continues a cycle of maths underachievement in the UK.

Mathematics Mastery exists to raise expectations for teachers and students and to break this cycle.

The road to mastery is not a short one, but teachers working with us for several years tell us a transformation has taken place within their school – paving the way for a future of increased achievement in mathematics.

Join our programme to transform the provision of mathematics in your school.

DR HELEN DRURY