

## Mathematics Mastery Primary

Working hand in hand with schools to deliver immediate impact and sustained subject excellence



## Hello!

#### **Welcome to Mathematics Mastery Primary.**

In the decade since I founded Mathematics Mastery, there's been a transformation in UK maths education. I'm proud of the role Ark Curriculum Plus has played in that. As a member of the Ministerial Steering Group for Maths, I have shared our unique insights with the DfE and worked closely with Maths Hubs across the country, making a significant contribution to Teaching for Mastery.

Pupil achievement has steadily improved as these initiatives have taken root at a national level, yet too many schools lack the comprehensive support required to deliver consistent, high-quality maths teaching.

Our **subject excellence programme** fills that gap, providing the expert support and practical building blocks schools need to teach primary maths using the mastery approach.

Informed by extensive international research and practical insights into effective maths teaching, I devised the Dimensions of Depth: the pedagogical principles at the heart of our approach (see p19). We then developed a programme to support schools to implement these successfully, which we rigorously tested in Ark schools and beyond. We worked with the Education Endowment Foundation to validate the programme's impact, making Mathematics Mastery Primary a reliable path to transform outcomes in your school.

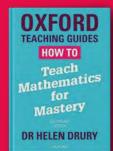
How does it work?

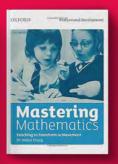
Success starts with confident teachers delivering brilliant maths lessons. That's why you'll have a dedicated subject expert guiding you through our 5-Step Improvement Process and your teachers will enjoy face-to-face induction training and flexible CPD. Plus, you'll have immediate access to the practical assessment, planning and teaching resources you need to embed Mathematics Mastery in the classroom.

Putting it all together, we enable your school to achieve and sustain **consistently excellent maths teaching**.

We partner with hundreds of schools, including some of the largest MATs in the country. I feel privileged to be working with so many incredible school leaders and teachers, united in a shared mission to help all learners make progress in maths, whatever their starting point. I hope you will join us!

#### **DR HELEN DRURY**EXECUTIVE DIRECTOR OF EDUCATION







## Put simply, what we do works!

## Independent evidence, pupil results and feedback from partner schools shows our programme works.

Mathematics Mastery Primary has been shown by the Education Endowment Foundation (EEF) to give pupils on average **two months' additional progress** after one year on the programme\*. This proof of impact is why the EEF is funding 100 subsidised places for new schools to join the programme in 2023-24. Learn more.

#### **OUR PARTNER SCHOOLS AGREE THAT THE PROGRAMME HAS IMPACT:**



It's having an impact on **pupil progress** 



It has deepened pupils' mathematical thinking



Teachers' **subject knowledge** has improved

#### WHAT PEOPLE SAY

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We've seen a significant change in the children's understanding and enjoyment of maths and strengthened subject knowledge and confidence among staff.

CLAIRE PETTMAN ASSISTANT HEADTEACHER

ST STEPHEN'S CATHOLIC PRIMARY SCHOOL

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It's tailored to fit your needs and the journey it takes you on as a school almost guarantees you the results you want.

MARTIN BEESTON DEPUTY HEADTEACHER

PADDOX PRIMARY SCHOOL

\* The EEF report on their randomised controlled trial, showed that Year 1 pupils on the Mathematics Mastery Primary programme made on average two months of additional progress, when compared to pupils not on the programme. https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/mathematics-mastery-primary

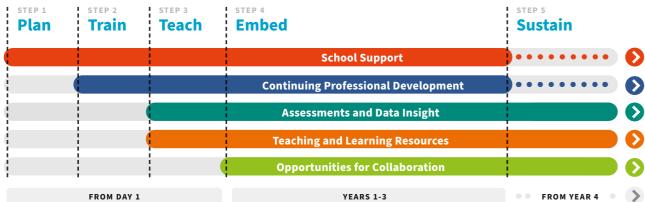


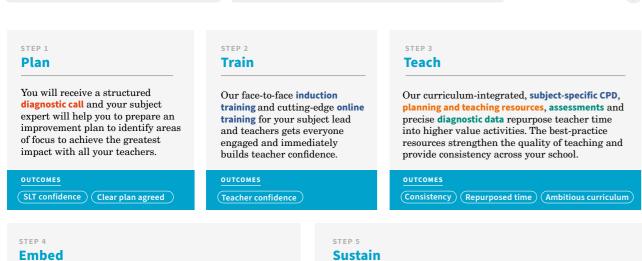
### Framework for success

The 2021 EEF School Planning Guide\*\* highlighted that 'the best available evidence indicates that **great teaching** is the **most important lever** schools have to **improve outcomes** for their pupils.'

To achieve powerful teaching that changes lives, teachers have told us they need to have strong subject knowledge, the best evidence-based pedagogies, rigorous assessment and effective planning, all working together.

Our Subject Excellence Programmes follow the AC+ 5-Step Improvement Process, which is based on over a decade's experience of transforming results in one of the most respected MATs and hundreds of schools nationwide. Improvement is a journey – that's why you will have a dedicated subject expert to guide you step by step, helping you achieve and sustain excellence.





#### Once the foundations are set, we work with you to attain Longer term, we collaborate to build sustained impact, Induction excellence in subject teaching. We provide in-school and CPD support new staff. Regular teaching resources and CPD leadership and teacher coaching and offer support through updates keep your offerings current and informed. Benchmarked school visits, joint learning walks and an intensive assessments provide ongoing confidence. You'll remain part programme leadership course. Teachers access a programme of a network of similar schools, staying up-to-date on new of subject pedagogy and on-demand videos. This approach research. Together, we'll annually evaluate programme success, ensures outstanding subject teaching in your school. maintaining maximum impact for your pupils. OUTCOMES Pupil progress Pedagogical expertise Consistency Pedagogical expertise Pupil progress

#### A fully integrated programme

All the components of Mathematics Mastery Primary work together to ensure your school, staff and pupils get real impact from the evidence-led subject excellence programme.



#### **SCHOOL SUPPORT**

From day one, your dedicated subject expert collaborates with teachers to create a tailored improvement plan for your school. They'll then support you to success through the five steps over multiple years.



#### **CONTINUING PROFESSIONAL DEVELOPMENT**

Teachers and leaders get immediately actionable CPD at point of need. It supports subject knowledge, pedagogic delivery, curriculum design and more. Flexibility is key, with online or in-person sessions.



#### **ASSESSMENTS AND DATA INSIGHT**

Formative assessments for data-led instruction are available in each lesson, unit, term and year. Standardised assessments, directly linked to the curriculum, identify pupil learning gaps for targeted intervention.



#### **TEACHING AND LEARNING RESOURCES**

Curriculum-integrated planning tools and resources ensure successful programme delivery. From day one, you access carefully sequenced support for consistent, impactful, engaging lessons, built on best-practice pedagogies.



#### **OPPORTUNITIES FOR COLLABORATION**

You join a subject teaching network, fostering the exchange of best practices. Teachers and leaders connect at in-person CPD events, including induction and an annual conference, creating a community of practice.

<sup>\*\*</sup>Access the 2021 EEF School Planning Guide: https://educationendowmentfoundation.org.uk/news/introducing-eef-school-planning-guide-2020-21

## Dedicated school support

From day one, you'll have a dedicated Mathematics Mastery Primary subject expert from our team of educators. They each have a background in or currently teach primary maths. They'll collaborate with your leaders and teachers to create a tailored improvement plan for your school. Then they'll help **introduce**, embed and sustain the programme over multiple years, ensuring a lasting positive impact on your students.

#### M360 diagnostic call

After a thorough review, a diagnostic call with your subject expert helps identify key focus areas for maximum impact to build an improvement plan to achieve these goals consistently with all teachers.

#### **School visits**

Your subject expert will regularly visit your school for joint learning walks with the Mastery Lead, to observe programme delivery. You can also involve them in co-planning or they can run customised CPD workshops.

#### **Online development sessions**

Our regular one-to-one sessions offer coaching and mentoring for your Mastery Lead. These are carefully designed to work for each stage of your implementation journey.

#### **Support for you**

Get in touch with your subject expert by phone or email, whenever you need advice or have questions. No query is too small and no problem too big. We are here to help!

888 Meet some of our team on page 22



Raaj (my AC+ link) is being so incredibly helpful at settling me into the role and empowering me to then empower teachers."

**ABBIE PEARCE-DYKE MASTERY LEAD** 

HATFIELD ACADEMY















The professional development we've received has been the key to why it has been so successful so quickly in our school."

**LAUREN HARRISON** TEACHER AND MATHS CHAMPION

ALDERMOOR FARM PRIMARY SCHOOL

## Actionable CPD at point of need

#### CPD that is relevant and immediately actionable

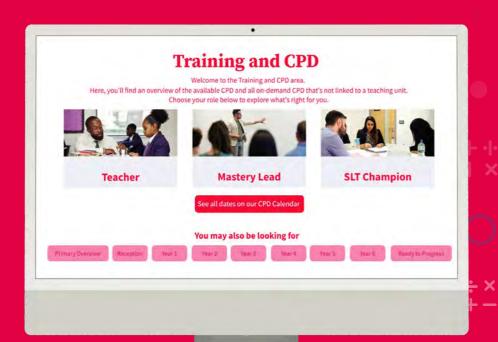
Mathematics Mastery Primary provides targeted continuing professional development that's **immediately actionable**, covering subject knowledge, pedagogy, curriculum design, assessment and more. It's **flexible** - accessible online just when you need it or through inspiring and practical in-person sessions that foster a **community of practice**.

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I have really valued these sessions, as a leader I found them challenging in a good way, as you ask thought-provoking questions that challenge my thinking and allow me to consider other views. If I can talk about it during these sessions, I've got the confidence to talk it through with staff."

SAM SLYDEL MATHS LEAD

THE MILL PRIMARY ACADEMY



#### gain a badge – a great way to evidence their professional development as steps towards further qualifications like NPQs. **Termly 'Preparing to Teach' webinars** Strengthening teachers' topic-specific subject **knowledge** for the upcoming term, our webinars support teachers in effective programme delivery. Breakouts focus on common challenges within similar year groups. It's a chance to share good practice and collaborate with other partner schools.

#### **Leadership certification**

**Induction training** 

Everyone joining the programme takes part in induction training. New schools have four in-person places, and **everyone can attend online**. It's a wonderful way to get

your team excited and prepared for their journey on the programme and to set them up for success. Plus, all modules are available on-demand (in our bespoke MyMastery platform) to revisit when required.

'Teaching Mastery' certification

Teachers enjoy online, termly **CPD** 

that builds subject and pedagogical

**expertise**. For each completed module they

Your Mastery Lead receives termly online CPD and ongoing mentoring from their subject expert. They will earn the Ark Curriculum Plus Certificate in **Programme Leadership**, providing recognition for both them and your school.



#### **In-school visits**

Your subject expert can deliver some of the above CPD sessions during one of their visits, providing more bespoke training to meet your school needs.

#### **On-demand video training**

Short videos in each unit offer content tutorials, knowledge recaps to refresh subject knowledge and task modelling. This bite-size CPD is easily accessed for immediate implementation by your teachers.

## Assessment to inform teaching

Mathematics Mastery Primary includes formative assessments within lessons, units, at the end of term and at the end of year, along with curriculum-linked standardised assessments. They help pinpoint pupil learning gaps and guide effective interventions.

#### **Formative assessments**

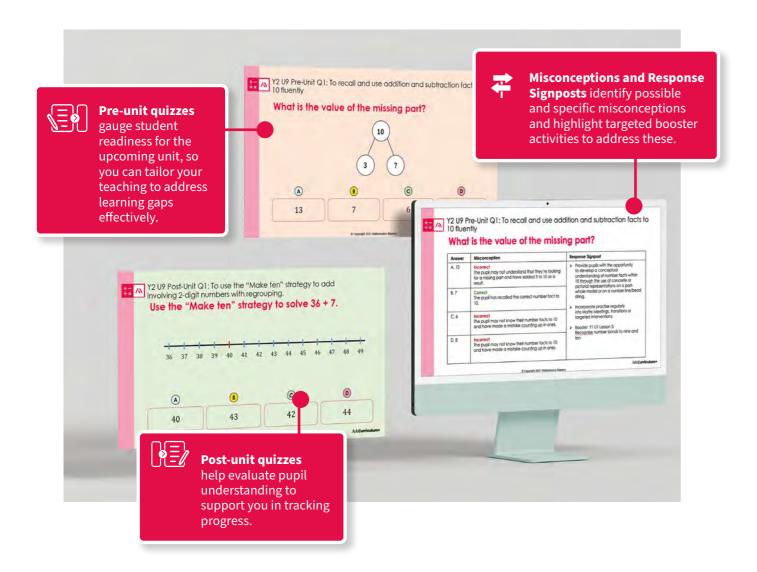
Our unique curriculum-integrated formative assessments focus on one concept per question, helping teachers understand areas needing support. They test what students have learned, reveal knowledge gaps, and uncover misconceptions, helping teachers identify learning barriers.



Pre-unit assessments allow our teachers to understand the prerequisite knowledge that pupils need before going onto new content and how to address those gaps before starting."

HANNAH PARSONS VICE PRINCIPAL

**ARK GLOBE ACADEMY** 



## Termly standardised assessments

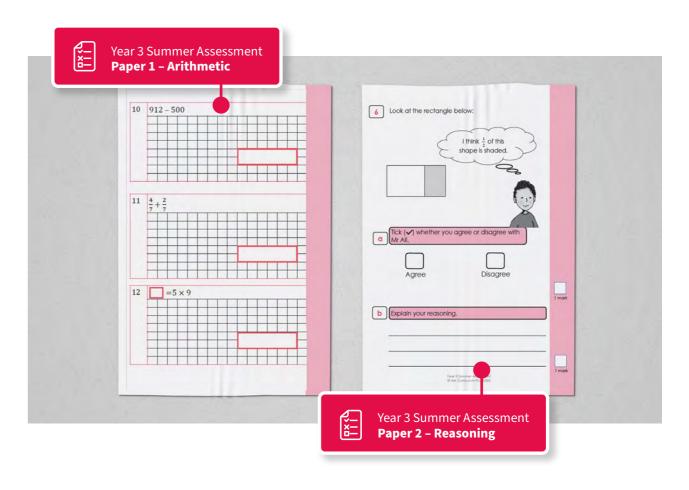


Mathematics Mastery Primary presents a picture of your school's progress compared to **national data samples**, providing reassurance and a clear view on how and what to improve.

Summative assessments on Smartgrade (our partner platform, included when you join) are **standardised yearly** and provide a large, nationally representative data sample.

#### **UNIQUELY, THE PROGRAMME PROVIDES:**

- Comparison to current attainment data rather than historic – crucial for identifying pandemic-related gaps.
- A large, nationally representative data sample from all our partner schools.
- School benchmarking to identify areas of strength and development.
- Targeted reteach planning and support to guide improvement.



## Best-practice teaching and learning resources

#### We provide all the resources so you can focus on your pupils!

The best-practice planning tools and comprehensive lesson resources provide everything your school needs to deliver the programme successfully. From day one, your staff will have access and support to deliver consistent, impactful, engaging and pedagogically strong maths lessons, sequenced to support pupils' development of fluency, mathematical talk, reasoning and **problem-solving**.

#### THE TEACHING AND LEARNING RESOURCES:

- Build on solid, evidence-led pedagogical principles – the Dimensions of Depth (see p19) - which give you confidence that they will have the greatest positive impact on your pupils.
- Promote oracy in a flexible and fun way that works for your pupils, making mathematical success accessible to everyone.
- Provide structure and support so that you own the curriculum, with quick videos and at-a-glance planning guides.
- Are created with early career teachers (ECTs), non-specialists and specialists in mind, giving the relevant level of guidance for each.
- Include adaptation examples and guidance to suit your pupils' and school's needs.

#### WHAT'S INCLUDED?



#### **Planning**

Curriculum maps Programme of study

Planning guides Unit narratives



Lesson slides

Task sheets

Key representations

Maths Meetings

Interventions



Click here to access a free **Programme Preview** and see examples of these resources.



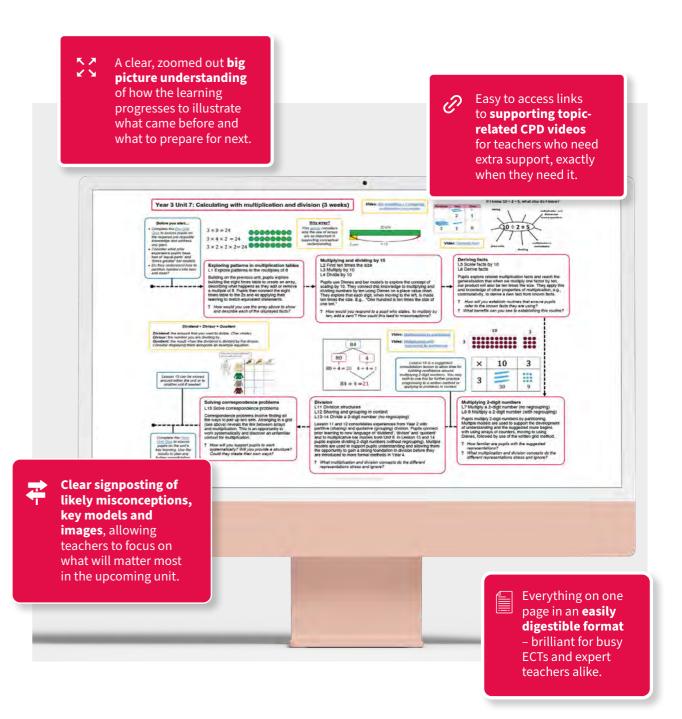
#### **Unit narrative**

The unique unit narratives are loved by all our partner schools. They give an at-a-glance overview of the key content and learning covered in a unit, providing teachers with full ownership and understanding of their curriculum and its intent. Each one gives teachers guidance on the sequence of lessons, possible adaptations and signposts to **relevant CPD** videos and research articles.

The additional planning resources and thoroughness of the plans have definitely given teachers confidence in delivering well planned maths lessons."

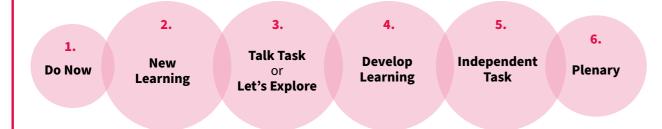
MICHAEL WARNES MASTERY LEAD

**BURE VALLEY SCHOOL** 



#### **Lesson resources**

The Mathematics Mastery six-part lesson structure is unique and allows teachers to take control of the learning, based on what is happening in the classroom that day. Assessment for learning opportunities are threaded throughout, constantly building upon what pupils are learning at every stage in the lesson.



Fully editable slide decks are provided for each lesson, including notes and guidance to support teaching and ownership. The Dimensions of the Depth (see p19) pedagogical principles are embedded in each lesson, building accessible best practice. Oracy is elevated by combining the use of sentence stems, Star Words and Talk Tasks – making mathematical success a reality for all pupils.



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We have had a number of ECTs this year. All have commented how the resources provided have supported their workload and have been useful for resourcing lessons."

LAUREN SMALLMAN MASTERY LEAD

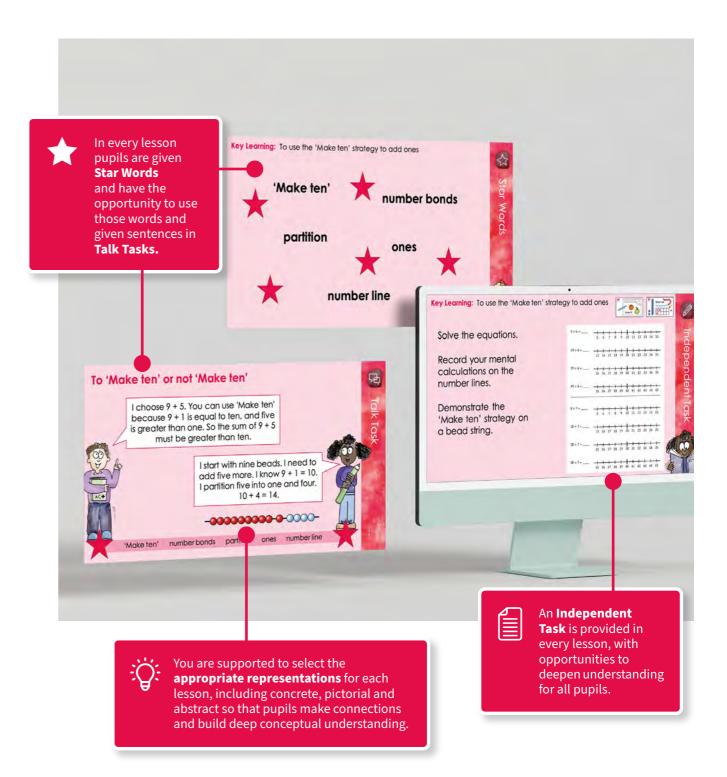
RIVERSIDE PRIMARY SCHOOL

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More time is spent on thinking about the quality of explicit instruction and modelling now that teachers are not creating all lesson resources."

KANWALJIT SACHDEVA ASSISTANT HEADTEACHER

BEDFONT PRIMARY SCHOOL



#### **Maths Meetings**

Maths Meetings are a vital part of the programme, building pupil fluency and oracy. They take place daily for 10 minutes outside of the maths lesson and provide flexible, fun retrieval opportunities fitted to your individual pupils' needs. They allow pupils to develop fluency, consolidate and embed prior learning, and build their mathematical language with a real sense of joy. This daily activity generates energy and enthusiasm for maths in every classroom.

#### TO SUPPORT DELIVERY WE PROVIDE:

- Comprehensive guidance on what to include by year and by term.
- Video examples.



Maths Meetings are crucial in keeping learning consolidated and content regularly reviewed. This enables pupils to remember more and has had a huge impact on improving end of KS1 SATs results (90% expected, 32% greater depth)."

ELLIE WARNER MATHS LEAD

SMARDEN PRIMARY SCHOOL



#### **Ready to Progress interventions**

Our interventions enable teaching assistants and other non-teaching staff, regardless of their experience, to deliver **high-quality intervention sessions** in one-to-one and small group settings, with minimal preparation time.

#### THE PROGRAMME CONTAINS:

- **Diagnostic placement quizzes** to pitch the support and challenge perfectly for each child.
- Over 140 pupil-facing videos so that you can share modelled examples from maths specialists.
- Structured activities for every intervention focus so that pupils have opportunity for purposeful practice, application and reasoning.
- Comprehensive support for the adult leading the intervention that builds their subject and pedagogical knowledge.

The interventions were designed in line with Education Endowment Foundation best practice: "TAs work in structured settings, with high quality support and extensive training from experienced trainers and/or teachers." Plus, they're aligned with the DfE Ready to Progress criteria, so you can trust they work to achieve pupil success.



The interventions have helped students apply different skills and methods in their maths lessons and their tests."

FAIZA SHAZ TEACHER

BECKFOOT ALLERTON PRIMARY SCHOOL AND NURSERY



## Be inspired by like-minded schools

#### **Building a community of practice**

Partner schools join a subject teaching network, sharing best practices and learning from each other. Attend in-person CPD events, including induction training and our annual conference, to collaborate with and be inspired by your peers. Your subject expert may connect you with local or similar context schools, helping you gain insights on delivery or simply see Mathematics Mastery Primary in action in other settings.

#### **Annual conference**

We host an exclusive annual conference to facilitate sharing and learning between our partner schools and offer access to new research and thinking.

With exciting keynote speakers and practical workshops, you leave feeling reinvigorated, reenergised and ready to continue making a real **difference** to your pupils' achievement and progress.

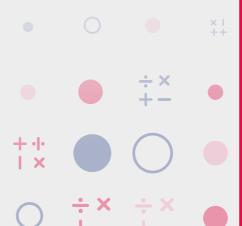


I feel so inspired by today's sessions. Really enjoyed myself and picked up lots of ideas."

**JOANNA STIRRUP** CONFERENCE ATTENDEE 2023

ST AUGUSTINE'S CATHOLIC ACADEMY

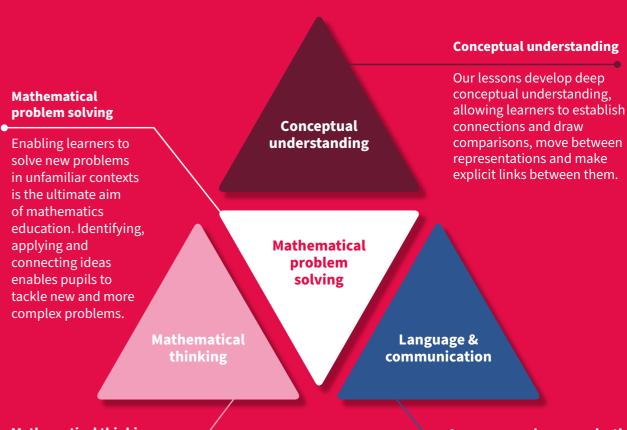
of those who completed our conference survey rated the opportunities to network with other schools as Good or Excellent.



## Unique pedagogy

#### The Dimensions of Depth are our pedagogical principles, derived from research and practice.

Together they enable all pupils to build a deep understanding of maths. That's why they are embedded throughout our subject excellence programme, in our school support, CPD, assessment, and planning and teaching resources.



#### **Mathematical thinking**

Our curriculum is designed to encourage all learners to think mathematically with tasks that require them to specialise and generalise, work systematically, generate their own examples, classify and make conjectures.

#### Language and communication

Our curriculum is carefully sequenced to develop confident use of the language, signs and symbols of mathematics. Talk Tasks are part of every lesson to help with this development.

# Standing out from the crowd

The impact of our programmes is clear, but in case you need even more reasons to choose AC+...



### Collaboratively designed and refined in classrooms

Grown in collaboration with Ark Schools, one of the highest achieving MATs in the UK, we continually learn and co-create together. Plus, we test what really works live in the classroom, to make improvements that will have the biggest positive impact.

Our programmes support disadvantaged pupils – Ark Schools pupils make nearly half a grade more progress than their peers nationally. We're here to help give all pupils the opportunities that an excellent education provides.

### Recognised as an educational leader

We're proud to be recognised as a leader in subject improvement. We work with the Education Endowment Foundation, The Brilliant Club and the Fischer Family Foundation, whose research provides robust evidence of our impact. We collaborate with the subject associations, along with universities including Cambridge and UCL.

## Accountable to you and your pupils

We are a non-profit organisation. Our full attention is on supporting our partner schools and making our already impressive programmes the best they can be. We're particularly passionate about helping disadvantaged children and we aim to level the playing field, so that every young person can succeed.

The schools that we work with are charged a financial contribution which goes right back into delivering and developing the programmes. We're not accountable to shareholders, we're accountable to you!

## Aligned to Ofsted to support your quality of education

The Education Inspection
Framework looks for consistency
between the intent of schools'
curricula, and the ways schools
empower their team to realise these
plans. We have supported many
schools to be expertly prepared for
an Ofsted visit by:

- Providing a powerfully sequenced, academically ambitious curriculum for all.
- Equipping maths leads with the confidence to articulate their curriculum intent, implementation and impact.
- Delivering immediately actionable teacher CPD at point of need, supporting subject knowledge, pedagogic delivery, curriculum design and more.

## Our expert team

Our team have all been teachers or in school leadership roles. They all love working with Mathematics Mastery Primary schools because they truly believe in the power of research to inform practice and to narrow the attainment gap. Everyone is a member of the Chartered College for Teaching and the Association of Teachers of Mathematics – meaning we engage with the latest research and the subject community directly.



Claire Crosbie



**Tyler** 

**James Protheroe Jones** 



Verna-Jean **Gervais** Shepherd



Anthony Latham

The change in

the children's confidence that

really shines

LYNSEY GALE SENIOR LEADER

**THOMAS'S ACADEMY** 

through."

results has been

amazing but it's



Castledine



**Davis** 

## It's easy to



Let us know you're interested by email,



We'll have a virtual meeting or a call with you to learn more about your school and we will confirm if you're eligible for one of the 100 subsidised places available on the



Agree you're joining the Mathematics Mastery programme with your senior



Get set up with Smartgrade and have a diagnostic call to agree the plan for your school's implementation.



Attend induction training and receive full support to introduce the programme in your school.

#### **OUR OTHER SUBJECT EXCELLENCE PROGRAMMES**

#### **PRIMARY**



Geography Mastery



History Mastery



Science Mastery

#### **SECONDARY**



English Mastery



Geography Mastery



Mathematics Mastery



Science **Mastery** 





phone or by booking a meeting.



programme.



leadership and sign a contract.





#### **GET IN TOUCH**

Speak to a member of our team about partnering with AC+ today.



partnerships@arkcurriculumplus.org.uk



020 3116 6363



Or book a call online at a time that suits you: calendly.com/ark-curriculum-plus









# We look forward to partnering with you!

We work with schools like yours nationwide to deliver immediate impact and sustained subject excellence.

So if you're looking for stronger pupil outcomes, more confident teachers and consistently high-quality teaching and learning across your school... Relax. With Ark Curriculum Plus, you're in safe hands.

## Start your journey to subject excellence today!



Click here to request access to our **Programme Preview** and see more detail of what you get on the programme.



Click here to find out more about the **100 subsidised places** available to join the programme.

#### **Ark Curriculum Plus**

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