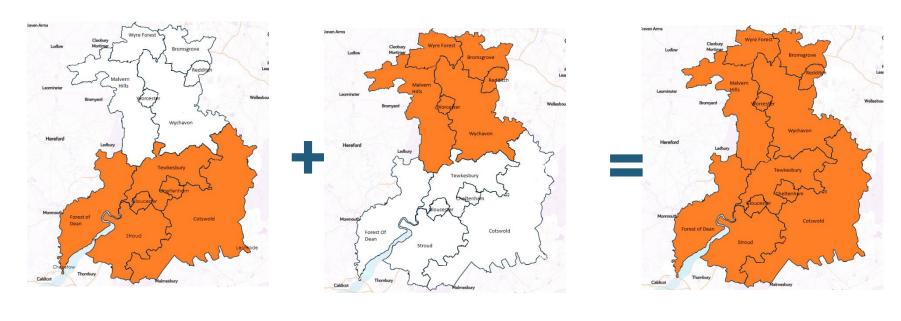




We support teachers and leaders by facilitating classroom based action research and innovation projects to improve the enjoyment, achievement and participation in mathematics.





















What's the purpose of the Maths Hubs?

The core purpose of the Maths Hubs Programme, coordinated by the NCETM, is to help schools and colleges lead improvement in mathematics education in England. They seek to harness all the maths leadership and expertise within an area, to develop and spread excellent practice, for the benefit of all pupils and students. They are part of the wider development of school-led system leadership in England.



We support teachers and leaders by facilitating classroom based action research and innovation projects to improve the enjoyment, achievement and participation in mathematics.





Preparatory

optional phase

For schools not yet ready to join the main development phase (eligibility criteria apply).

Mastery Readiness Work Groups

Schools identified as suitable to take part in this phase are supported by their Maths Hub's Mastery Readiness Lead to strengthen five key areas:

- Vision and culture underpinning maths
 Subject expertise
- Mathematical mindsets
- School systems
- Arithmetical proficiency.

Development

phase

All schools complete this phase, which lasts a whole school year.

Development Work Groups

These groups are sometimes referred to as TRGs as they incorporate Teacher Research Groups.

- Two lead participant teachers from each of six or seven schools meet every half term as a group. The meetings involve shared lesson observations and discussion.
- Each school gets a termly bespoke support visit by the Mastery Specialist.
- The group keep in contact and share experiences from their classroom and school settings. The ongoing work between the participating teachers creates a whole year of school-toschool collaborative professional development.

Building phase

All schools build on previous phase through ongoing Work Group activity.

Embedding Work Groups – continued small group collaboration.

- Schools who have worked on estalishing
 Focus is on systems and culture to teaching for mastery become part of an Embedding Work Group, staying in touch with their Development Work Group colleagues.
- support mastery, subject knowledge, lesson design and continued support for school and subject leadership.

Refinement phase

All schools continue their mastery journey through continued participation and collaboration.

Sustaining Work Groups – further continuous participation to sustain, improve and refine whole school teaching for mastery approaches.

- Open to all schools who entered the main Teaching for Mastery Programme between 2015 and 2018.
- Year-on-vear participation in a Sustaining Work Group becomes an ongoing aspect of professional development for the school
- Building on work done previously, schools will use mastery approaches consistently and improve learning in maths by strengthening leadership, refining systems and designing curriculum and lessons which allow all children to achieve.

Teaching for mastery in maths

the primary school pathway





Ready to develop your approach?

If you love maths - the chances are you want your pupils to love maths, too.

At GLOW Maths, we believe every child can do, and can enjoy, mathematics.

Our <u>Mastery Readiness</u> and <u>Teaching for</u> <u>Mastery programmes support teachers in developing approaches that will help children further explore, and gain a deeper understanding of, maths.</u>

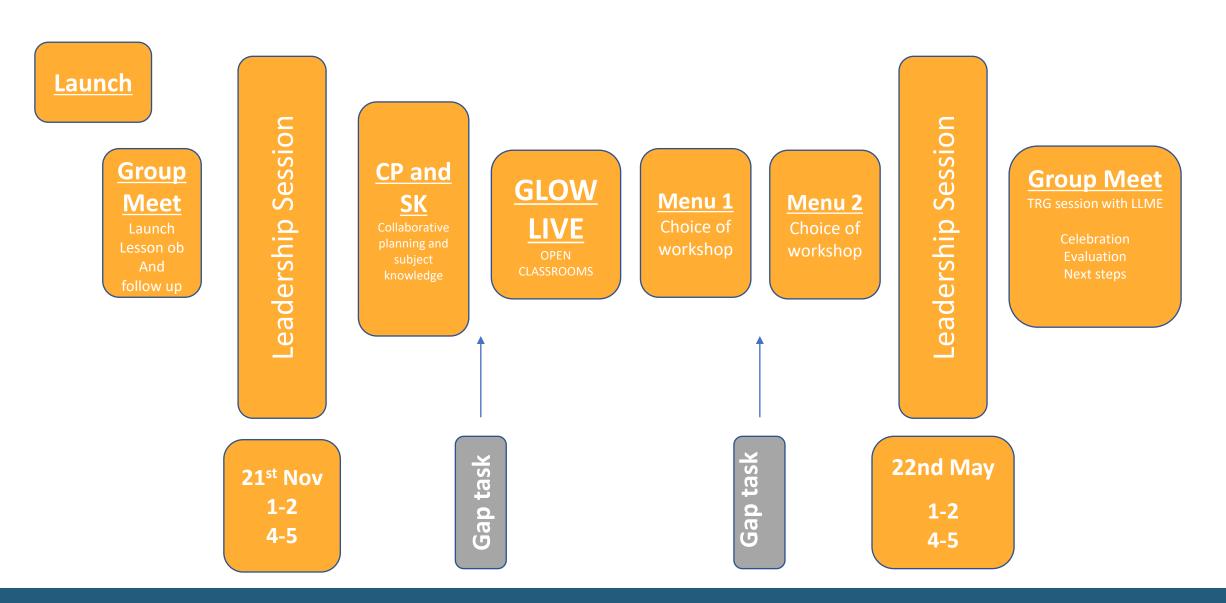
There's still time to get involved in this year's programmes ... so <u>visit www.glowmathshubs.com</u> or contact the GLOW <u>team on 01242 545149</u> to find out more and sign up today!



What is Primary Readiness?

- Fully funding DFE Programme to develop schools, teachers and children
- An enabler for schools to access the full programme
- A commitment to beginning to make changes to maths provision
- A developmental programme for schools to evaluate and improve maths teaching and learning
- A bespoke programme with support from a trained Mastery Readiness Lead
- an introduction to teaching for mastery
- Support and collaboration for leadership and in classroom teaching
- ✓ strategies to overcome potential barriers
- Support for the headteacher in addressing leadership issues related to mathematics and contributing to raising standards
- An opportunity to work closely with other schools that are also developing mastery readiness
- Four year(+) support from the Maths Hubs in preparing, developing, embedding and sustaining teaching for mastery in their school.

Sustaining Teaching for Mastery in Maths









Collaborative Planning and Subject Knowledge 2022/23

Teachers from your school come along and join a session either in Gloucestershire or Worcestershire.



Opportunities to join a session every year group.

As a school sign up for as many as you would like through the year.



GLOW LIVE Coming to a school near you!







Sustaining Workshops 2022/23



Fluency

What does it mean to be fluent in maths? Why do children need to be? How can we support children in becoming fluent? Spend a morning with colleagues exploring these questions and how we can use manipulatives, maths talk and meaningful practice, so your children are able to become more efficient, accurate and flexible mathematicians.

TfM in Mixed age

Want to know how to teach two lessons at the same time? Want to know how Mixed-Age classes can still master their own curriculum? Come along and learn the different options other schools use to teach mastery in a mixed - age class.

New to Teaching for Mastery

Are you new to a school that uses a mastery approach to teaching maths? Come and share your experiences with others in a similar position and gain an understanding of the strategies that can be used to develop deep and sustainable knowledge for all pupils.

SEND

Anne Watson (2005) argues that 'low attaining children can think mathematically'. What questioning, activities, support, and beliefs can we promote to engage SEND children in the maths lesson?

To scheme or not to scheme

Are the published resources you have working for you?
Come and work together with others exploring published resources and how you can get the best out of them.

Focus on Mathematical Thinking

How do we ensure that pupils have the chance to reason, problem solve and make connections throughout a lesson? Come and work together with others to share ideas and strategies.

Parent Project Mastering Number

Do you want to support parents to help their children's number skills?
Work together using produced materials to prepare and so schools can host Mastering Number workshops for parents and children.

New Maths Leads

Are you new to maths leadership?
Not sure where to start? Come and spend a morning working with other new maths leaders looking at all aspects of leading the best subject.
We'll explore everything from evaluation and audits to observations and schemes.

Involving Parents in Maths learning

Do you want to develop parental engagement in maths learning? Positive parental involvement has a huge impact on a child's achievement. This workshop gives you the opportunity to work with others, keeping parents informed and encouraging an open dialogue to support learners.

Focus on representation

Are you confident in using concrete resources to support teaching and learning? Come and work together to explore which resources support different areas of maths.

Lesson Design

Are you wondering how to maximise learning time in your main maths session? Join us, as we look at how the different components of lesson design can help to build deep and sustainable knowledge for all pupils.

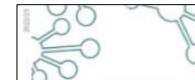
EYFS

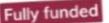
Are you wondering how to apply the principles of a mastery approach to teaching maths in EYFS? This workshop will explore practical ideas and resources that will support planning, teaching and continuous provision.

Oracy in Maths

Do you know your minuend from your subtrahend? Would you like children to be able to speak with clarity about their mathematics? This workshop has a strong focus on vocabulary and sentence stems and how these work together with representations.







Specialist Knowledge for Teaching Mathematics (SKTM)

Early Years Teachers

Develop mathematical subject knowledge and pedagogy

What is involved?

This programme is designed to improve the subject knowledge and pedagogical knowledge for all practitioners teaching and supporting the learning of early maths.

There are two types of SiCTM Early Years pathways: Pathway One: Number Patherns and Structures, and Pathway Two: Pathern, Shape, Space and Measures. Each pathway is the equivalent of a four-day programme and has three assertinents, three associated pedagogy sessions, and a task to support the transition from theory to practice. There is also a final case unit that aims to review quality provision.

Who can take part?

These programmes are designed for individuals who would like to develop their specialist knowledge for teaching moths to three-to five-year-olds. This may be particularly relevant for teachers who have moved phases or have not received moths-specific training.

Find out more

Search early years SKTM online or contact your local Moths Hub:

Further information here or click here to apply

Benefits

- Your pupils will demonstrate a positive attitude towards mattis, being willing to have a go, persevere, and share their mathematical ideas.
- You will review the mathematical learning appartunities and pedagogical approaches across your wider provision
- You will evaluate and enhance the apportunities to promote mathematical learning in all areas of provision

The programme is fully funded by the Maths Hubs Programme, so is free to participating schools.





We have a few spaces on the Specialist Knowledge for teaching Maths for Early Years Teachers







RESEARCH



SUPPORT







There's still time to get involved in this year's programmes.



