

During MathsFest, we will be running a selection of practical workshops on topics that matter to you/your school.

Workshops will run at 11am, 1pm and 2pm and you can attend one per time slot. Take a look at the information below. Once registered you will be sent a link to book your preferred sessions.

Itinerary

09:00 Arrival/registration

09:30 Welcome

10:00 Keynote speech

10:45 Break

11:00 Workshops A

12:00 Lunch

13:00 Workshops B

14:00 Workshops C

15:00 Closing words

15:15 Depart

Secondary MathsFest

Workshops A

Session A1: Let's talk... Grid algebra

Presenter: Sam Brace

In this session we will explore Grid Algebra and how it can be an effective tool to help students' understanding of algebra. It will be modelled on a unit of work for Year 7s as an introduction to expressions, showing potential paths towards solving equations. Please bring a laptop or tablet as you will be getting hands on with the software. It will be aimed at KS3 students and their introduction into algebraic notation and construction of expressions; it could also be adapted for KS4 classes.

About Sam: Sam is a secondary maths teacher with over 10 years of classroom experience. He currently works at Christopher Whitehead Language College in Worcester. Sam is a Secondary Mastery Specialist who began working with GLOW in 2018.

Session A2: Let's talk... Intelligent practice

Presenter: Tom Harper

During this workshop, we will be delving into the issues around intelligent practice. How can teachers ensure the independent practice students are doing is as effective as it can be? How can teachers curate practice questions for their students, which are both coherent and purposefully varied? How can they make use of pre-existing resources to enhance this process? How can they develop these skills with departmental colleagues?

About Tom: Tom is a secondary maths teacher working at North Bromsgrove High School. He is a Secondary Mastery Specialist and has worked with GLOW since 2021.

Session A3: Let's talk... A Level classroom culture

Presenter: Rob Southern and Susan Whitehouse

Students arrive in our A level classrooms at different stages in their mathematical journeys. They have varying ideas about what maths is and what learning maths entails. This session will provide ideas for creating an environment to enhance the students' experience of learning maths at this level, including an example first lesson.

About Rob and Susan: Both experienced teachers of A Level Maths and Further Maths, Susan and Rob have recently collaborated to write 'Teaching A Level Maths'. Their book provides all teachers of A-Level Maths, both new and experienced, with a guide to both content and pedagogy that they can implement in their own classrooms, offering inspiration and opportunities to reflect on their own practice.

Secondary MathsFest

Workshops B

Session B1: Let's talk... Algebra tiles

Presenter: Tom Harper

The session will be focussed on the uses for algebra tiles, with links to subtopics including simplifying expressions, expanding brackets (single and double), factorising and completing the square. The session will focus on the useability and the benefits across a range of attainment levels (higher and foundation) and the resulting limitations.

About Tom: Tom is a secondary maths teacher working at North Bromsgrove High School. He is a Secondary Mastery Specialist and has worked with GLOW since 2021. This year, he has been working with local secondary schools to embed teaching for mastery within their setting.

Session B2: Let's talk... Meeting the needs of SEND learners in a TfM context

Presenter: Louise Langford

This session will look at key barriers to learning maths and how to improve the learning experiences for those with SEND. It will focus on improving number sense, alongside core mathematical knowledge and skills, which are vital for attainment in maths. Through practical activity, you will have the opportunity to explore and develop your understanding of effective adaptations for learners with SEND, linked to 'The Five Big Ideas.'

About Louise: Louise is an experienced teacher with a passion for enabling all children to reach their full potential in maths. She has taught and led maths across the primary age range and now works in partnership with colleagues, to successfully develop maths teaching through the Maths Hubs. Louise has a special interest in working with learners with SEND and is an Assessor/Specialist teacher for Mathematical Learning Difficulties and Dyscalculia.

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Students arrive in our A level classrooms at different stages in their mathematical journeys. They have varying ideas about what maths is and what learning maths entails. This session will provide ideas for creating an environment to enhance the students' experience of learning maths at this level, including an example first lesson. The content is based on Chapter 1 of 'Teaching A Level Maths', co-authored by Susan and Rob.

About Rob and Susan: Both experienced teachers of A Level Maths and Further Maths, Susan and Rob have recently collaborated to write 'Teaching A Level Maths'. Their book provides all teachers of A-Level Maths, both new and experienced, with a guide to both content and pedagogy that they can implement in their own classrooms, offering inspiration and opportunities to reflect on their own practice.

Secondary MathsFest

Workshops C

Session C1: Let's talk... Ratio tables

Presenter: Tom Holden

Ratio Tables - One structure to rule them all. This workshop will explore multiplicative reasoning across the secondary maths curriculum. It will have a particular focus on the use of ratio tables as a coherent way to structure students' thinking and support them to see connections between different topics at both Key Stage 3 and Key Stage 4.

About Tom: Tom has been teaching secondary mathematics for 12 years. Currently teaching at Haybridge High School, he also leads on mathematics across The Four Stones Multi Academy Trust. He is a Secondary Mastery Specialist, currently working with secondary schools to develop teaching for mastery within their department's practice.

Session C2: Let's talk... Meeting the needs of SEND learners in a TfM context

Presenter: Louise Langford

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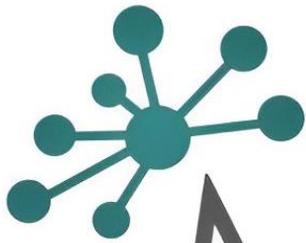
About Louise: Louise is an experienced teacher with a passion for enabling all children to reach their full potential in maths. She has taught and led maths across the primary age range and now works in partnership with colleagues, to successfully develop maths teaching through the Maths Hubs. Louise has a special interest in working with learners with SEND and is an Assessor/Specialist teacher for Mathematical Learning Difficulties and Dyscalculia.

Session C3: Let's talk... Maths in context

Presenter: Cat Van Saarloos

Using contexts that students can relate to, that they recognise as being relevant to their lives, can be transformational. With more students expected to study maths at Level 3 in the future, knowing how to motivate them will be critical. In this session we will get hands on with an activity and explore how to effectively plan authentic contextualised maths lessons.

About Cat: Cat is a Maths Education Support Specialist with Mathematics Education Innovation (MEI) a charity improving maths education for all. She is an expert in designing and delivering Core Maths professional development, providing support for teachers of Core Maths through the Advanced Mathematics Support Programme (AMSP).



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