# Specialist Knowledge for Teaching Mathematics Programme 

This Work Group is for Early Years (EY) practitioners who wish to develop their mathematical subject knowledge in conjunction with understanding the pedagogy that underpins the teaching of it. Understanding of mathematical structures will be explored so participants gain a detailed understanding of how children learn early mathematical concepts.

## WHO IS IT FOR?

The programme is aimed at individuals or groups of individuals who would like to develop their specialist knowledge for teaching mathematics, specifically in the EYs.

## WHAT IS INVOLVED?

Classroom practice will develop through a series of gap tasks where participants try out activities to promote depth of understanding, reasoning and fluency; these might include pupil interviews, lesson study and work scrutiny. Research and evidence are used to inform their practice and participants are encouraged to share these more widely in schools to support discussion on current policies and approaches. The programme will have the following elements:

- Independent study and setting-based work including gap tasks and evaluation.
- Online discussion as part of a professional community.


## INTENDED OUTCOMES

As a result of this project, participants will not only be able to 'do' mathematics, but will also have the appropriate pedagogical knowledge to teach and support their pupils well. Participants will develop both their knowledge about maths and knowledge about the teaching of maths, developing better pedagogy and being aware of how pupils learn, and how to teach the content most effectively. Classroom practice will develop through participants' engagement with gap tasks between meetings, trying out activities with pupils to promote understanding, reasoning and fluency.

Participants will understand the role that certain representations, models and manipulatives can play in the development of pupils' understanding of number and calculation, particularly place value and proficiency. Those involved will get better at working within classes and with small groups of pupils; they will gain knowledge of practical ways to apply the skills and understanding developed during the programme.

## THE WIDER CONTEXT

The Maths Hubs Network, across England, works on national projects by running local collaborative Work Groups of teachers around national maths education priority areas. One such priority is to improve the subject knowledge of all adults in maths classrooms.

Work Groups use a common evaluation process, which collectively provides a body of evidence on the project's outcomes. Your participation in this Work Group will contribute to your own professional learning and that of your colleagues, as well as contributing to the improvement of maths education at a national level.

Participants are expected to be working as classroom teachers.

All participants are expected to attend all the sessions and complete gap tasks in their schools between the sessions. They will also be asked to keep a learning log for their own use and contribute to the national evaluation process, probably through a short online survey after the Work Group has finished.

## WHO IS LEADING THE WORK GROUP

This Work Group will be run by:
Karen Thompson, St Giles Nursery School - NCETM Accredited PD Lead

## FUNDING

The programme will be fully funded through the East
Midlands East Maths Hub,
however there will be a $£ 15$
per session fee for non-
attendance to cover costs.

VENUE

St Giles Nursery School
Addison Drive
Lincoln
LN2 4LQ

## SESSION DETAILS

Wednesday 16th October 2019, 1-4pm
Wednesday 20th November 2019, 1-4pm
Wednesday 22nd January 2020, 1-4pm
Wednesday 18th March 2020, 1-4pm
Wednesday 6th May 2020, 1-4pm
Wednesday 17th June 2020, 1-4pm

## IF I'M INTERESTED, WHAT NEXT?

To reserve your place, please use the link below to our online booking system. For further information, please contact Julie Naidu, Maths Hub Coordinator, enquiries@ememathshub.org, tel: 01636817377.

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BOOK NOW
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