

Primary Mathematics Conference 2017

Keynote Speakers:

Sue Gifford - Principal lecturer in primary mathematics at the University of Roehampton

Gareth Metcalfe - Assistant headteacher and Director of I See Maths

Keynote 1 - Making Numbers: using manipulatives to teach arithmetic

Sue Gifford

Session summary:

Sue will share examples of good practice drawing on the latest research on using manipulatives to develop understanding of arithmetic. Progressing from teaching of numbers 1-12, to beyond 200, including ideas for teaching partitioning, arrays and times tables, Sue will highlight different ways teachers can support children make sense of arithmetic.

Age Range: All

Keynote 2- Building a mathematical culture

Gareth Metcalfe

Session summary:

Gareth will show us how to create a culture where all children enjoy the challenge and beauty of rich mathematical experiences. Sharing practical advice and tips on how to achieve this throughout your school.

Age Range: All

Optional Sessions: 10:50 - 11:40

Session 1A - Early years: developing deepening of understanding in number in EYFS.

Rob Newton & Kerry Bointon

This workshop will explore the learning from a two-year Maths Hub project exploring a small steps in learning approach to number and calculation through the foundation stage. The focus has been on developing practitioners' subject and pedagogical knowledge and

ensuring that children have strong conceptual understanding of the underlying mathematical principles they need to be ready for the mastery curriculum in year 1.

Age Range: EYFS

Session 1B - Effective assessment

Alison Hogben

This session will explore assessing pupils' depth of understanding, combining fluency, reasoning and problem-solving. It will also share a model of good practice for measuring attainment across KS1 and 2.

Age Range: KS1 and KS2

Session 1C - Primary STEM subjects: examples from mathematics and science.

Alison Borthwick

After a short review of what is meant by curiosity, a number of examples will be considered which exemplify meaningful connections between two primary STEM subjects.

Age range: KS1 and KS2

Session 1D - Problem solving

Alan Easterbrook

Problem solving is a key part of the curriculum, so how can we support all pupils in becoming resilient and tenacious problem solvers. This session will explore a range of strategies and ways of working that strengthen pupils' approaches to problem solving. It will also look at some high quality resources to support teachers in enabling children to become confident problem solvers.

Age Range: KS2

Optional Sessions: 12:05pm - 12:55pm

Session 2A - Mastery: incorporating teaching approaches from Shanghai into your lessons

Kim Mitchell

How can learning from Shanghai inform practice in the UK and what are the challenges? Primary Maths Mastery Specialist Kim Mitchell, who participated in the England-China Exchange Programme in 2016-17 will share her experiences in this workshop. She will share

their learning and explore ways in which a clearer understanding of Teaching for Mastery can have an impact in your school.

Age Range: KS1 and KS2

Session 2B - Using Numicon to achieve maths mastery in KS2

Helen Laflin

Numicon may be used across mathematics teaching to enrich learning. Using hands on activities we will explore how the use of Numicon can deepen understanding and achieve mastery of mathematics.

Age range: KS2

Session 2C - Making early years count

Sue Gifford

Explore the key aspects of early maths which predict later achievement and how we can help all children become successful mathematicians?

Age range: EYFS and KS1

Session 2D - Deepening mathematical talk

Gareth Metcalf

Explore a range of games and techniques to get all children talking about key concepts and reasoning mathematically. Using these techniques can aid children in achieving a greater depth of understanding of mathematics.

Age Range: KS1 and KS2

Optional Sessions 14:20 – 15:10

Session 3A - Developing the use of the bar model

Alison Hogben

The bar model is a tool used by children to visualise and represent mathematical concepts and solve problems. This session will explore how to introduce then develop its use across the primary phase.

Age Range: KS1 and KS2

Session 3B - Using Numicon to achieve maths mastery in KS1

Helen Laflin

Numicon may be used across mathematics teaching to enrich learning. Using hands on activities we will explore how the use of Numicon can deepen understanding and achieve mastery of mathematics.

Age range: KS1

Session 3C - Reasoning in the primary classroom

Helen Davids

Thinking and reasoning are both ways in which mathematical understanding may be deepened. Sometimes it is difficult to know what reasoning might look like in the classroom. This session will explore strategies to secure and deepen mathematical reasoning from EYFS to Y6 whilst unpicking the creation of deeper questions.

Age Range: EYFS, KS1 and KS2

Session 3D - Mixed age planning successes (including manipulatives)

Mari Palmer and Jo Fitton

Join us in this informative session to find out strategies used by academically successful schools, when teaching mixed age groups. As well as looking at mixed age groups it will include many practical ways of using manipulatives to provide support and challenges to pupils across KS2.

Age Range: KS2

