



Primary Mathematics Conference 2016

Keynote Speakers:

Ems Lord- Director of NRICH

Pauline Tyson- senior lecturer in primary mathematics at Oxford Brookes University

Keynote 1- Using NRICH to nurture young mathematicians

Ems Lord

Session summary:

In this keynote address the Director of NRICH, Ems Lord, will explore the essential aspects of nurturing young mathematicians. The discussion will include the role of mastery in developing primary mathematicians, and there will be opportunities to explore NRICH activities as well as reflect on the theoretical background underpinning their design. Ems will share other exciting developments at NRICH, including its newly launched Wild Maths! website.

Age Range: All

Optional Sessions: 10:50-11:40

Session 1A - Ems Lord

Developing problem solving in young children

In this workshop NRICH Director Ems Lord will address the problem-solving cycle in mathematics. The session will explore each step in the problem-solving process, including hands-on activities for both early years and primary-aged pupils to model each step of the process. During the workshop, delegates will be encouraged to share on their own experiences of teaching problem-solving in the classroom and consider the research which influences our vision for classroom problem-solving activities.

Age range: EYFS, KS1 and KS2

Session 1B- Alan Easterbrook

Reasoning our way to Algebra

In this session we will look at ways of introducing and developing algebraic ideas through reasoning activities. By exploring generality in a range of topics we will understand the purpose and meaning of variables, and develop these ideas into a deeper appreciation of algebraic structure, including equivalent expressions and sequences

Age Range: KS2



Session 1C - Alison Borthwick

Connecting primary mathematics and science

This is a practical session which will explore the very best ways to combine two amazing STEM subjects – mathematics and science.

Age Range: KS1 and KS2

Session 1D - Alison Hogben

Progression in fractions across KS1 and KS2

This will be an exploration of the progression in teaching fractions, sharing a range of practical and visual ideas.

Age Range: KS1 and KS2

Session 1E – Katy Drinkall

Teaching for mastery

An introduction to the principles of mastery and effective teaching techniques to support pupils in developing mastery of mathematics

Age Range: KS1 and KS2

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

Session 2A - Alison Hogben

Using the Bar Model to support pupils

The Bar Model is a visual representation used in problem-solving. Learn how to introduce and implement it in the classroom.

Age Range: KS1 and KS2

Session 2B - Alison Borthwick

Making an impact in mathematics

This workshop will start in EYFS and finish at KS2, simply through using Cuisenaire rods! Come and explore how this mathematical representation is a powerful tool for all ages of children to learn about mathematics and discover the impact this resource can have.

Age range: EYFS, KS1 and KS2



Session 2C - Michele Hattersley

Problem solved! – making sense of KS1 mathematics

This session is aimed at supporting teachers in engaging KS1 children in problem solving activities to deepen children's understanding and help them to make sense of mathematics.

Age range: EYFS and KS1

Session 2D – Pauline Tyson

Japanese Lesson Model

The IMPULS programme is specifically about the use of the Japanese Model of lesson study principles for improvement of teaching and learning of mathematics.

Age range: EYFS, KS1 and KS2

Session 2E – Zoe Griffiths

Exploring and enriching mathematics with Ri masterclasses

See activities in action that allow students to explore mathematics from new and exciting perspectives, whilst developing their mathematical thinking skills.

Age Range: Upper KS2

Optional Sessions 14:20 – 15:10

Session 3A – Lorraine Johnson

Mathematics through stories

Using stories to enhance focussed teaching and independent exploration of mathematical concepts. Developing further strategies to engage parents and support home learning of mathematics.

Age range: EYFS and KS1

Session 3B – Michael Anderson

Space mathematics

Learn more about the connections between space exploration and the mathematics curriculum; take away practical activities ready to be used within the classroom as well as exploring the wide range of free, quality assured resource collections the National STEM Learning Centre and ESERO-UK have to offer.

Age range: KS1 and KS2



Session 3C - Sandie Blakesley

Going Dotty with Geometry

Explore a range of ideas for KS2 Geometry using geoboards/dotty paper and resources from STEM e-library and ATM.

Age range: KS2

Session 3D - Alan Walker

Primary mathematics and science lessons using instant assessment for learning with feedback.

Research finds that pupils achieve more when receiving instant feedback during lessons. Take away free materials so you can do this in your school.

Age range: KS1 and KS2

Keynote 2- 'Mathstory' - mathematics across the curriculum

Pauline Tyson

Session summary:

'Maths is a creative and highly interconnected discipline', according to the NC. This session looks at how story books can be used to support mathematical connections across the curriculum.'

Age Range: All