

Reasoning and Problem Solving in KS2 Mathematics

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I See Maths Ltd

Tuesday 3rd March 2020

9:00am - 3:30pm, Saltwells EDC

- This course will show how mathematical reasoning can be embedded in all KS2 maths lessons.
- We will explore how equipment and images can be used to build understanding and a range of techniques for deepening learning and developing problem-solving will be shared.
- Make KS2 maths visual, engaging and deep!



Booking: www.helenowens-education.co.uk

Cost: Dudley Schools: £40 (including lunch) *subsidised by DSIA*

Non-Dudley Schools: £60 (including lunch)

Contact: helen@helenowens-education.co.uk



Saltwells EDC
Bowling Green Road
Netherton, Dudley DY2 9LY



Course Objectives



- To break learning into small steps, planning sequences of lessons to build conceptual understanding
- To represent mathematical ideas using equipment, images and bar models
- To use questions and tasks that develop and extend mathematical reasoning and talk
- To explicitly teach problem-solving skills, teaching relating problems together

Overview

- This course will show how mathematical reasoning can be weaved throughout the KS2 maths curriculum. We look at how learning can be broken down into small steps, and how practical and focused experiences can be used to deepen all children's conceptual understanding.
- We will look at how equipment, images and bar models can be used to model different KS2 maths concepts. A range of techniques for engaging all children in rich mathematical discussions will be shared, including the question structures used in '*I See Reasoning*'. We will also explore how opportunities can be provided for children to work at greater depth.
- A range of lesson examples and resources will be used to show an evidence-based approach for teaching problem-solving. Expect a highly practical, example-rich, thought-provoking day!

'Particular strengths of **I See Maths** are the quality of the CPD offered in terms of subject knowledge, pedagogy and embedding this into classroom practice.'

National Centre for Excellence in the Teaching of Mathematics