Reasoning and Problem Solving in KS2 Mathematics

Gareth Metcalfe I See Maths Itd

Thursday 28 January 2021

9:00am - 12:00 pm via Zoom

This course will show how mathematical reasoning can be embedded at all phases of sequences of lessons in KS2.

We will look at how to build initial understanding by separating key skills and using representations.

We will explore a range of ways to apply mathematical skills in varied, thought-provoking ways.

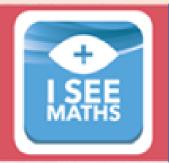
An evidence-based and practical session!

Booking: www.helenowens-education.co.uk

Cost: £25 per delegate



Contact: helen@helenowens-education.co.uk



Zoom

28 January 2021



Course Objectives

- To build conceptual understanding of key ideas by isolating key skills and using visual representations.
- To consider how reasoning prompts can be provided in different ways throughout sequences of lessons
- To build intelligent practice into sequences of lessons, enabling children to spot and explain patterns
- To build problem-solving within sequences of lessons, teaching problem-solving skills and giving opportunities for depth

Overview

- This course will show how mathematical reasoning can be weaved throughout the KS2 maths curriculum. We look at how children can reason as they learn new concepts by isolating key skills and using images to show mathematical structures. We will also consider how these representations can lead to children building abstract understanding.
- We will then consider techniques for engaging children in intelligent practice, so whilst they are applying key skills they can spot patterns and notice relationships. A range of strategies for embedding reasoning within sequences of lessons will be discussed.
- Finally, we will consider how we can teach children to problem-solve by focusing their thinking on question structures and breaking down key skills. Ideas and resources for differentiating within problem-solving will be shared.

'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

