



## Network Collaborative Projects 2019/20 NCP19-17

# Mathematical Thinking for GCSE

## Overview

### This Work Group offers

- Teachers and their departments support to address the reasoning and problem-solving challenges of the mathematics curriculum and its assessment at GCSE
- Support for long-term development of these skills across KS3 and into KS4, and also the immediate needs of current KS4 pupils facing the challenges of GCSE
- The opportunity to develop departmental professional development processes and produce longer-term improvement plans



## Who is this for?

Secondary schools based in Kingston, Merton, Richmond, Sutton and Wandsworth wishing to begin or continue a programme of professional development to address the teaching and learning implications of GCSE. Each school will send two members of department. One should be an experienced mathematics teacher and some leadership responsibility for mathematics would be desirable, though not essential.

## If you're interested, what next?

Contact the London SW Maths Hub Administrator Lesley Dibbens if you would like more information  
[admin@london southwest mathshub.co.uk](mailto:admin@london southwest mathshub.co.uk)

Complete the [online booking form](#) to secure your place in the Work Group

## Location and times

Location: Burntwood School, Burntwood Lane,  
London, SW17 0AQ

Session 1: Friday 6th December 2019

Session 2: Friday 17th January 2020

Session 3: Friday 6th March 2020

Session 4: Friday 5th June 2020

All sessions run from 8.30 am to 1 pm.



## Mathematical Thinking for GCSE

### What is involved?

Teachers in the Work Group will attend 4 Friday morning professional development sessions across the academic year. Each session will look at different strategies to support pupils with the reasoning and problem-solving challenges of GCSE. Between sessions will be a small gap task involving the implementation of a strategy with a class and some reflection of its impact. We will evaluate the impact on our pupils through a lesson study model and guided reflection.

### Intended outcomes

- Prepare pupils for the reasoning and problem solving challenges of the GCSE in parallel with embedding the wider development of these skills across all key stages.
- Promote effective models for department professional development and support improvement planning.
- Use participation in a Work Group as the basis of continued professional development work.

### Expectations of participants and their schools

Participants will be expected to attend all 4 workshops.

Schools will be expected to commit to release two participants for the days required and to support them in providing time for collaborative work with the in-school and partner-school colleagues. They will also be asked to contribute to the national evaluation process, which is done through a short online survey on the day of the final Work Group session.

In between sessions, participants are expected to develop their own practice around reasoning and problem-solving and work closely with their in-school co-participants to keep a reflective journal. If possible, the Work Group Lead may visit some of the participating schools to support and evaluate practice in between central meetings

### Cost

There is no cost to participate in the programme.