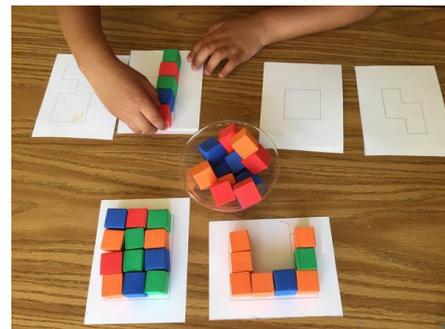


# Developing the use of manipulatives in Key Stages 1 and 2

## Information Sheet

IN18-03



## Overview

Are you looking to develop your maths mastery practice in a safe, collaborative, professional environment? This work group will focus on the use of manipulatives and representations to ensure pupils understand mathematical concepts before leaping to the abstract. Exploration, gathering and modeling of ideas will be investigated and a strong focus linking pedagogy and subject knowledge across the primary curriculum will ensure all participants have practical ideas to try out in their classrooms throughout the year.

### Who is this for?

Teachers in primary, first or middle schools who teach maths.

Teachers who are wanting to develop their understanding and good practice following a maths mastery approach.

### What is involved?

Meeting as a group at key points during the year to investigate, discuss and share mathematical concepts. Completing gap tasks as part of the everyday maths teaching.

Evaluating your own development and how this has impacted on your pupil's progress and attainment.

## Intended Outcomes

As a result of this project, participants' skills and confidence in the maths classroom will be increased. They will develop knowledge of the pedagogy of maths teaching through the mastery approach. A greater understanding will be gained of how manipulatives and representations can support the development of pupils' understanding of number, place value and calculation, and how this then can develop confidence with solving problems across the mathematics curriculum. The course will cover years 1 to 6 enabling teachers to develop their subject knowledge across the primary maths curriculum.

## Developing the use of manipulatives

### The wider context

Collectively, the network of Maths Hubs across England work on projects around national maths education priority areas. One of those priorities requires Maths Hubs to provide high quality training in maths in order to improve children's understanding of the 'concrete, pictorial, abstract' (C.P.A.) approach, together with a particular focus on practitioners' subject knowledge. Each Maths Hub participating in a national project runs a local Work Group, where teachers come together over a period of time to work on areas defined by the project. All Work Groups are subject to a common evaluation process, which collectively provides a body of evidence on the project's outcomes. So, your participation in this Work Group will contribute to your own professional learning, and that of your school colleagues, as well as making a contribution to the improvement of maths education at a national level.

### Expectations of participants and their settings

Participants are expected to be working in a classroom environment teaching maths and/or involved with individual or small group support and intervention. All participants are expected to attend all the sessions and complete gap tasks in their schools between the sessions. They will also be asked to contribute to the evaluation process after the Work Group has finished. This will probably be in the form of a group presentation together with evidence of impact of the project.

The dates are as follows:

Tues 4<sup>th</sup> Dec twilight session 4pm – 5pm (introduction of project)

Tues 15<sup>th</sup> Jan 1pm – 3:30pm

Tues 5<sup>th</sup> Mar 1pm – 3:30pm

Tues 22<sup>nd</sup> May 1pm – 3:30pm

Tues 11<sup>th</sup> Jun 4pm – 5pm (final evaluation/group presentation)

### Funding

There is no charge for teachers and schools to take part in this Work Group. All costs are met by Maths Hub funds. Cover and travel expenses will need to be funded by each school as necessary.

### Who is leading the Work Group?

Louise Jeffs: SLE Maths specialist

Louise has led numerous national action based research projects and has presented at the Jurassic Maths Hub conference. She is an experienced primary teacher and leader and has supported many schools in Dorset with their maths development.

### If you're interested, what next?

Please contact Louise Jeffs [ljeffs@wimborneacademytrust.org](mailto:ljeffs@wimborneacademytrust.org) or [jurassicmaths@woodroffe.dorset.sch.uk](mailto:jurassicmaths@woodroffe.dorset.sch.uk) for any further information.

Please apply by completing the Expression of Interest form by clicking [HERE](#).