

# Supporting the ECF for Teaching Mathematics in Primary Schools

NCP18-15



## Overview

Amongst the many challenges that the pandemic has brought to school leaders, ensuring that NQT and RQT development is sustained and supplemented to mitigate the impact of school closures on developing Specialist knowledge for teaching mathematics is key.

In 2020-2021, this support will continue. This work group will deliver subject specific professional development for new teachers who have had their training time cut short due to the pandemic. We will deliver 6 key topics as a theme to develop planning, subject knowledge and pedagogical skills which are transferable across the subject.

### Dates

#### **Session 1 – 11<sup>th</sup> February 2.00pm – 4.30pm**

- What makes great maths teaching?
- Plotting the development of fractions across the key stages
- Planning and delivering a sequence of lessons on number strand
- Considering misconceptions and common issues

#### **Session 2 – 8<sup>th</sup> March 2.00pm – 4.30pm**

- Reflection on gap task
- As session 1, for ratio & proportion strand

#### **Session 3 – 22<sup>nd</sup> April 2.00pm – 4.30pm**

- Reflection on gap task
- As session 1, for geometry strand

#### **Session 4 – 13<sup>th</sup> May 2.00pm – 4.30pm**

- Reflection on gap task
- As session 1, for algebra strand

#### **Session 5 – 17<sup>th</sup> June 2.00pm – 4.30pm**

- Reflection on the gap task
- As session 1, for statistics strand

#### **Session 6 – 1<sup>st</sup> July 2.00pm – 4.30pm**

- Reflection on the gap task
- As session 1, for “Face your Nemesis”
- Next steps

### Who is this for?

Primary school RQT and NQT teachers. Schools are invited to send more than one participant for the project.

### What is involved?

The work group comprises of a six session program delivered across the academic year, focused on classroom practice. The work group will encompass the EEF recommendations on Improving Mathematics in Key Stages 1 and 2.

The sessions will include face to face training, activities, gap tasks and reflections to improve practice. Participants will track the development of each key theme, number and place value for example from National Curriculum Key stages 1-2. Mapping the development of the theme across these key stages to ensure ambitious delivery of key concepts through highly effective pedagogy.

# Intended Outcomes

Participants will:

- Have a deeper knowledge and understanding of the curriculum across KS1&2 and how this is developed at KS3 and the expectations of students at the end of each Key Stage
- Develop a deeper insight into the key issues and misconceptions behind math topics
- Deepen their own subject knowledge and awareness of connections within the curriculum
- Identify misconceptions and plan a series of lessons to support pupils in the topic area
- Use and evaluate appropriate pedagogies to teach the topic area
- Participants will work with their departments to unpick and analyse topics to inform collaborative planning and development of schemes of work
- Subject knowledge and pedagogy across the department will improve
- Pupils will gain a deeper understanding of the topic area and the underlying mathematics
- Pupils will develop a more connected understanding of the curriculum
- Pupil engagement and attitude in the topic areas explored will improve

## Expectations of participants and their schools

- Attend the Work Group sessions and carry out a series of follow up tasks within their own classrooms related to teaching the challenging topic being explored.
- Work with other members of their school, as appropriate, to develop the teaching of each topic and learn to apply this practice to all planning.

## The wider context

Collectively, the network of Maths Hubs across England work on projects around national maths education priority areas. One of those priorities includes the phrase: “working to develop and/or deliver in-service specialist knowledge for teaching mathematics (SKTM) programmes for practitioners in primary schools.” 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. This Work Group extends work started in all Maths Hubs in autumn 2016.