

# Early Career Primary Teachers

Specialist Knowledge  
for the Teaching of  
Mathematics programme

## NCP23-28a

### Outline

**This programme** is designed to support the children in early career primary teachers' classes to deeply understand number and the number system. The programme supports the early career teachers (in their first or second year of teaching) to:

- anticipate when children might not understand and to notice misunderstandings when teaching
- use published resources critically
- recognise when children have a deep understanding.

### Details

#### What is involved?

The model for this programme is a series of PD workshops with in-school work between these sessions.

Participants will be supported to:

- Analyse published resources to support making decisions when planning.
- Analyse teaching episodes to support the identification of mathematical and pedagogical teaching decisions.
- Make carefully considered changes to their practice.
- Observe and analyse the impact of these changes on learners (in particular, focus learners)
- Reflect on the implications, share thinking and findings

#### What are the benefits?

Participants will:

- ✓ Actively explore the research question 'How can we support learners to deeply understand numbers and the number system?'
- ✓ Enhance their maths subject knowledge with an emphasis on the key structures
- ✓ Understand key elements of numbers and the number system and how understanding can be supported, including attending to language, structures and representations.
- ✓ Review their practice as a result of the sessions and make specific adaptations to have an impact on pupil outcomes.

### The wider context

**Understanding number and the number system** is connected to all other mathematical understanding. This programme will consider what is effective in the learning and teaching of number, with a focus early number concepts and the number system, specifically:

- Subitising and additive composition
- Counting and the additive structure of the number system
- The linear number system
- Unitising including place value
- The multiplicative nature of the number system: whole numbers and decimal numbers

### Expectations of participants and their schools

Schools must be able to commit to the full programme. This involves a total of eight sessions as well as classroom and school-based activity. The sessions include interaction as a group; collaborative planning of teaching sessions in pairs or trios; teaching of planned sessions with groups of focus learners; videoing children's responses; and sharing reflections. Participants should also be supported by their school leadership to explore outcomes from the project with their mentor and/or maths subject leader. The mentors/subject leaders are invited to the launch and the final sessions which are both online twilights.

### Workshop details

All the sessions are online, led by Stefanie Burke  
Launch – Tuesday 14<sup>th</sup> November 4.00 – 5.30 pm (+mentor)  
Workshop 1 – Tuesday 5<sup>th</sup> December 1.00 – 5.00 pm  
Workshop 2 – Tuesday 9<sup>th</sup> January 1.00 – 5.00 pm  
Workshop 3 – Tuesday 6<sup>th</sup> February 1.00 – 5.00 pm  
Workshop 4 – Tuesday 12<sup>th</sup> March 1.00 – 5.00 pm  
Workshop 5 – Tuesday 30<sup>th</sup> April 1.00 – 5.00 pm  
Workshop 6 – Tuesday 4<sup>th</sup> June 1.00 – 5.00 pm  
Final session – Tuesday 18<sup>th</sup> June 4.00 – 5.30pm (+mentor)

Fully funded by the Maths Hubs Programme so is free to participating schools.

#### Link to registration form

[Specialist Knowledge for Mathematics – Primary Early Career Teachers 2023 – Jurassic Maths Hub](#)