MATHSHUBS

Bespoke

October 2021 | Issue No. 22

NEWS from the Maths Hubs Programme

Welcome to our autumn edition of Bespoke, which reflects how the work of the Maths Hubs Programme is evolving to match wider developments in education, and how, in one project, the scale of activity is growing significantly.

Maths Hubs Programme evolves

The Maths Hubs Programme enters its eighth academic year with its work evolving to match changes taking place across the school and college landscape. At the same time, the core mission remains: providing professional and school development activities to help teachers, leaders, departments and schools increase the chances of pupils acquiring the lasting mathematical understanding that will help them progress in education and life.

Two **NEW** themes are included in the mix of free activities that schools can choose from this year.

1

Leading change across a department, school or group of schools

New projects are tailored for secondary heads of department and those leading secondary maths across a multi-academy trust. These strengthen what has always been important to Maths Hubs, namely not to just focus on purely personal development of individual teachers, but also wider, more sustainable change in a department or school.

2

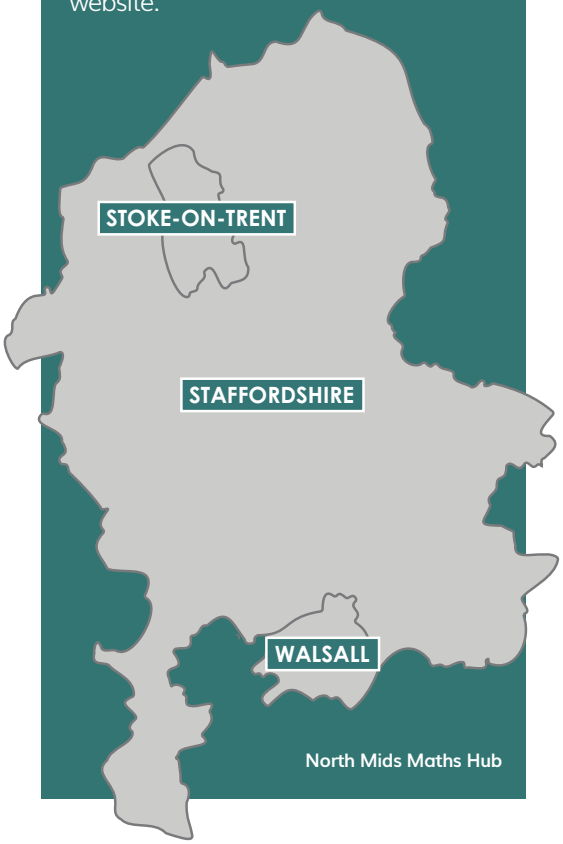
Increasing support for new teachers, or teachers new to teaching maths

With the arrival of the two-year Early Career Teacher (ECT) pathway, Maths Hubs now offer dedicated ongoing collaborative projects for ECTs in all phases, as well as a programme to support those teaching secondary maths whose initial teaching qualification was in another subject.

Meanwhile, the shape and rhythm of professional development activities in the programme continues to evolve as a result of lessons learned during the pandemic. Online collaboration—with no travel—enables much more frequent contact to take place between project participants. Exploring the right balance between that and face-to-face meetings, which have their own unique benefits, will be an ongoing endeavour.

A coverage map for every Maths Hub

With 40 Maths Hubs now covering every corner of England, each hub now has its own unique map, showing the local authority areas it serves, matching full lists found via the Find your hub section of the NCETM website.



NCETM
NATIONAL CENTRE FOR EXCELLENCE IN THE TEACHING OF MATHEMATICS

Maths Hubs CPD
opportunities in 2021/21

Among the established mix of CPD projects offered by Maths Hubs this year are a few that are new in character and aim at new targets.

Early Career Teachers (all phases) and non-specialists

Specialist Knowledge for Teaching Mathematics – Primary Early Career Teachers and Secondary Early Career Teachers are projects designed to support primary and secondary Early Career Teachers (teachers in their first two years of teaching) in developing specialist knowledge for teaching mathematics, thus enabling them to understand, teach and support pupils in maths in the classroom.

Specialist Knowledge for Teaching Mathematics (Secondary Non-specialists) is for those who are currently teaching some maths but did not undertake initial teacher training (ITT) in maths. Participants will develop mathematical subject knowledge and understand the pedagogy that underpins the teaching of it.

NCETM School Development Lead (all phases)

The **NCETM School Development Lead Programme** is for individuals leading change in a school or group of schools other than their own, and will benefit those who have previous experience of developing leadership capacity in schools/groups of schools or who are new to the role. Participating leaders will undertake a range of activities, including supporting schools, groups of schools or MATs to establish sustainable cross-school approaches to collaboration and development for maths teaching.

Secondary Subject Leadership (in a school or across a MAT)

Secondary Subject Leadership offers focused support to secondary heads of department/subject leaders, to enable them to better understand and implement teaching for mastery approaches across their department, and to develop in their role as leaders of both student learning and teacher professional development.

Secondary Maths MAT Leads is for those who lead maths across schools within a MAT, to enable them to better understand and develop effective maths pedagogy approaches across those schools. It will also support participants to develop their role as a leader of system change, curriculum change, and teacher professional development.

New to teaching Core Maths

Teachers new to teaching Core Math can join this project and develop specialist knowledge for teaching Core Maths, as well as increasing their confidence in teaching the course.

Checkpoints

A year's worth of diagnostic activities for Year 7s has been produced, along with associated professional development online seminars. The materials are available to download from the NCETM website, and will be used as part of the Years 5-8 Continuity projects, being run in Maths Hubs across the country.

What are Checkpoints?
Checkpoints are diagnostic activities that will help teachers assess the understanding Year 7 students have brought with them from primary school, and suggest ways to address any gaps that become evident. Consisting of classroom-facing PowerPoint slides and notes for teachers, they are ready-to-use. There'll be enough for three Checkpoints a week across the whole school year, and the first four decks are already available to download.

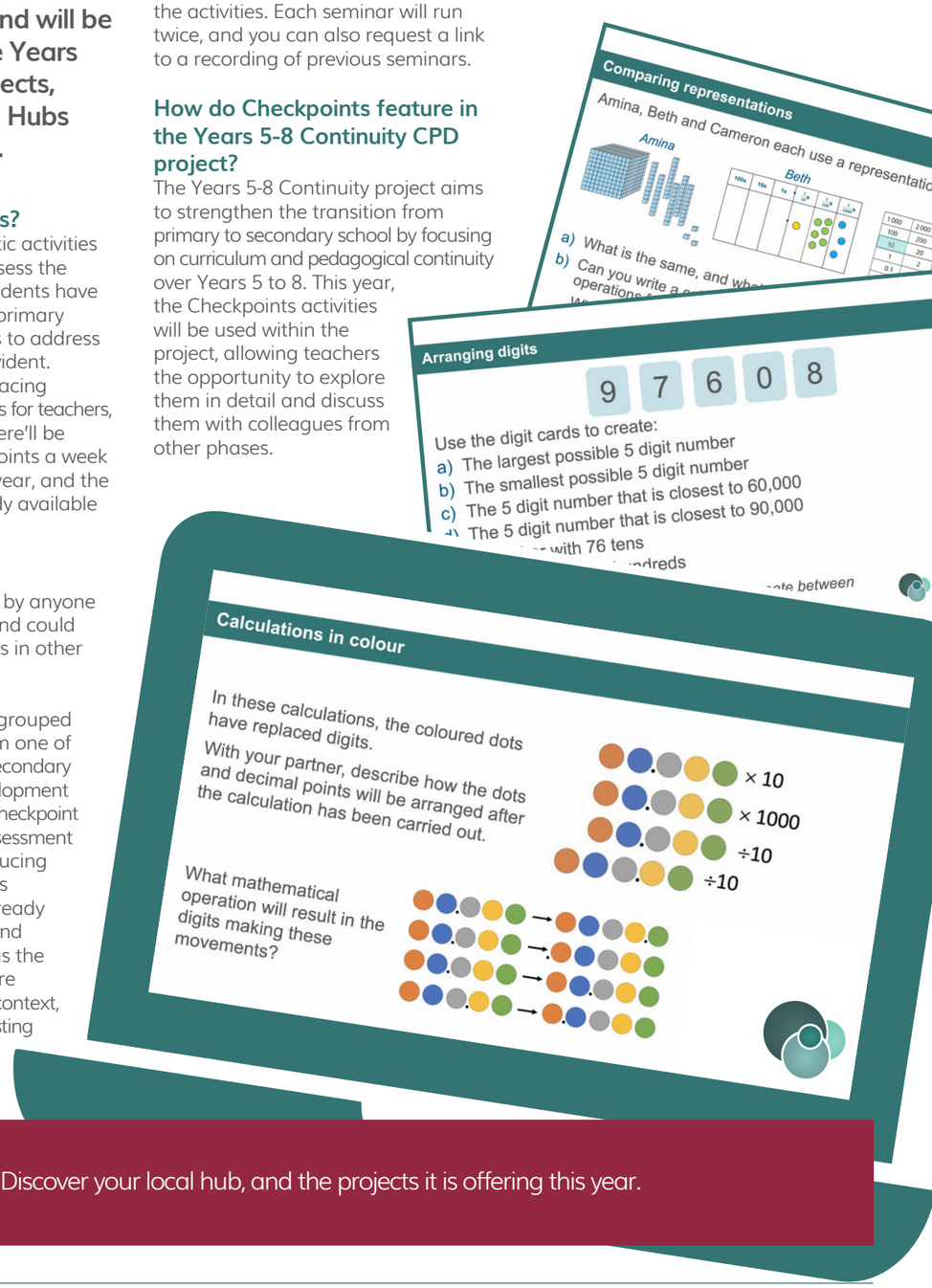
How do I use them?
Checkpoints can be used by anyone teaching Year 7 maths, and could also be useful for students in other year groups.

Each PowerPoint deck is grouped around the key ideas from one of the core concepts in the Secondary Mastery Professional Development Materials. The 10-minute Checkpoint tasks might be used as assessment activities, ahead of introducing concepts, to help teachers explore what students already know and identify gaps and misconceptions. As well as the tasks themselves, there are extensive notes exploring context, giving answers, and suggesting adaptations and follow-up tasks.

What do the online seminars involve?
To get the most out of the activities, teachers are encouraged to sign up for the associated professional development seminars. The seminars, timed around the release of each batch of Checkpoints, fully explain the guidance and advice wrapped around the activities. Each seminar will run twice, and you can also request a link to a recording of previous seminars.

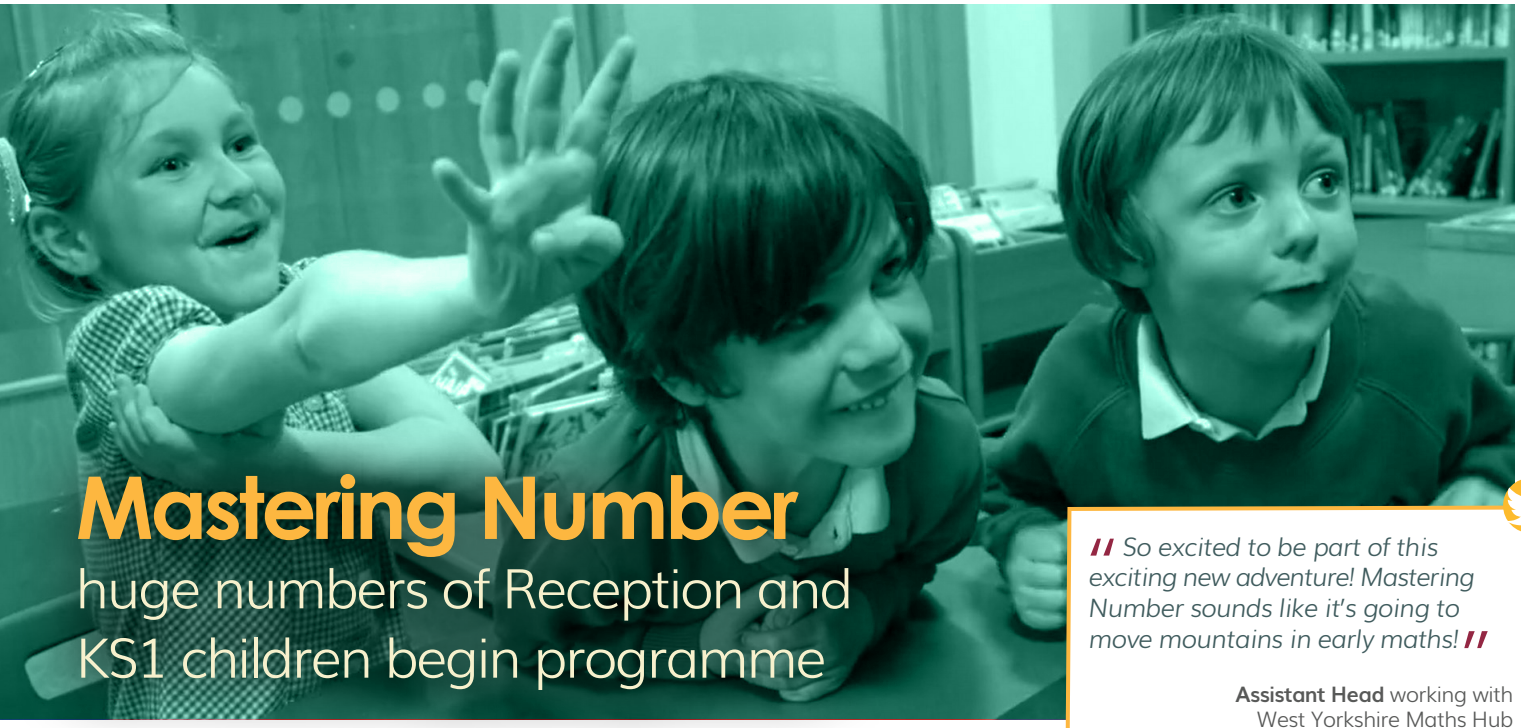
How do Checkpoints feature in the Years 5-8 Continuity CPD project?
The Years 5-8 Continuity project aims to strengthen the transition from primary to secondary school by focusing on curriculum and pedagogical continuity over Years 5 to 8. This year, the Checkpoints activities will be used within the project, allowing teachers the opportunity to explore them in detail and discuss them with colleagues from other phases.

What else do I need to know?
Search '*NCETM Checkpoints*' to discover the resources, or find them at **ncetm.org.uk/checkpoints**. You can also search on social media using the hashtag #NCETMCheckpoints, and find out how other teachers are using them as well as sharing your own experiences and insights.



Find out more about Years 5-8 Continuity, the new CPD projects available, and other projects run by Maths Hubs

Discover your local hub, and the projects it is offering this year.



Mastering Number

huge numbers of Reception and KS1 children begin programme

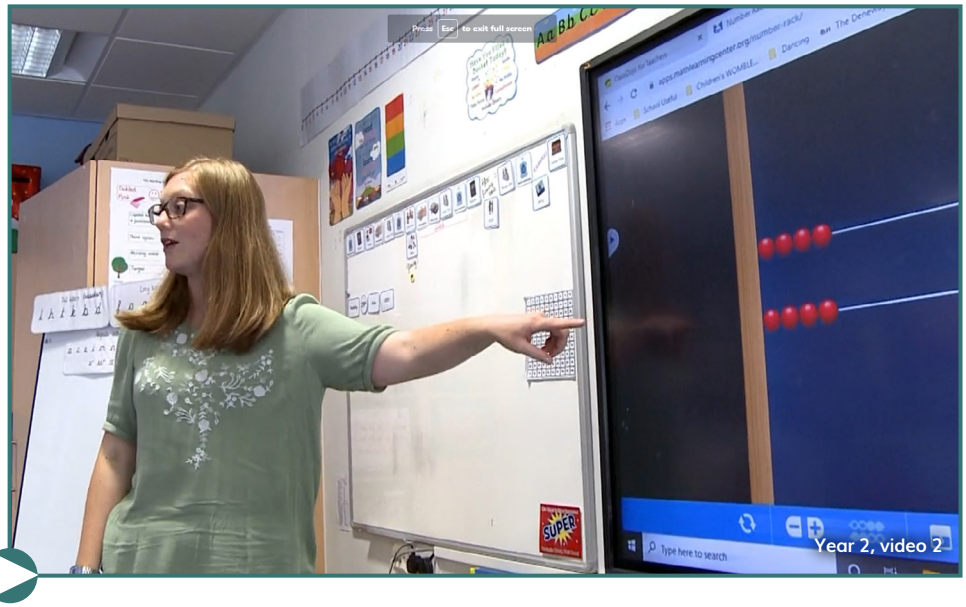
> *"So excited to be part of this exciting new adventure! Mastering Number sounds like it's going to move mountains in early maths!"*
>
> **Assistant Head** working with West Yorkshire Maths Hub

Mastering Number is a new, large-scale programme, aimed at securing 'number sense' for all Reception and KS1 children, through short, daily, direct teaching sessions.

The focus is on fluency and flexibility in manipulating numbers, and on moving away from 'counting in ones' which is often associated with finding maths difficult later on.

Almost a quarter of England's primary schools have signed up, with each Maths Hub coordinating the participation of around 100 schools. Online sessions introduce the materials and pedagogy to Reception and KS1 teachers for use in their classroom.

> *"Loving developing CPD and subject knowledge by taking part in the @NCETM mastering number project."*
>
> **EYFS teacher**



For example, in early teacher sessions:

Reception teachers focus on the cardinality of numbers up to five. That is, not just knowing how to count to five, or what the numerals looks like – but what the 'three-ness' of three, or the 'two-ness' of two feels like! Children learn to quickly recognise groups of up to five, in different arrangements, without counting.

Year 1 and 2 teachers are taken through a variety of different representations for numbers 5 to 10 that can be used in their classrooms, each representation emphasising a different feature of the number and beginning to look at the numbers that make up each number, e.g. 7 is made of 5 and 2.

Each online teachers' session has over 100 participants, but despite this, they are engaging and interactive and teachers are able to take what they have learned straight into the classroom. Integral to the programme are the smaller, online communities where teachers share experiences and further develop their learning.

The Maths Hubs Programme is funded by the DfE and coordinated by the National Centre for Excellence in the Teaching of Mathematics

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