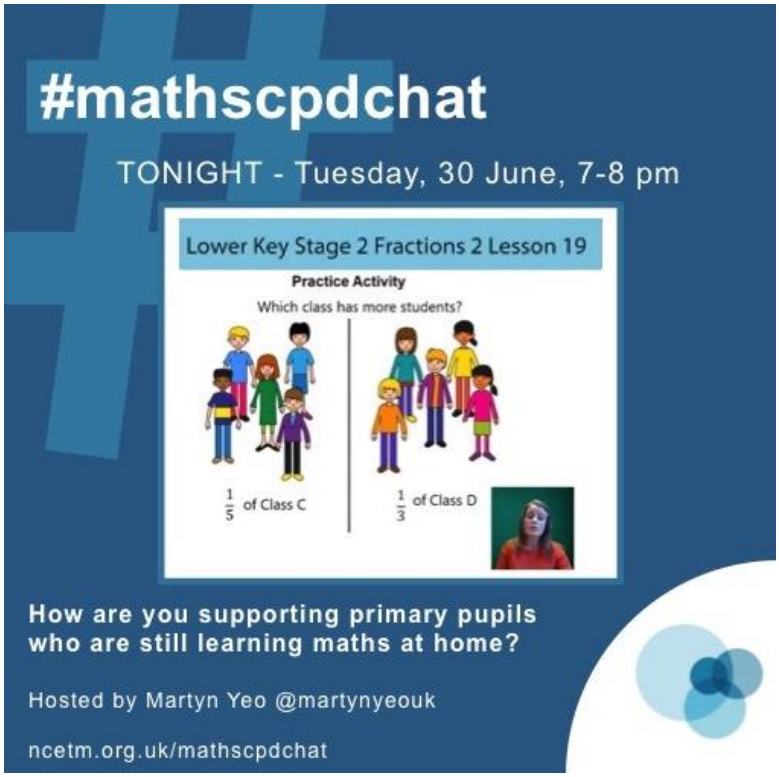
National Centre for Excellence in the Teaching of Mathematics

#mathscpdchat 30 June 2020

How are you supporting primary pupils who are still learning maths at home?
Hosted by Martyn Yeo

This is a brief summary of the discussion – to see all the tweets, follow the hashtag ***#mathscpdchat*** *in Twitter*



Some of the areas where discussion focussed were:

the host tweeted a **poll** which revealed that **the percentage of primary teachers** contributing to this #mathscpdchat who are **presently teaching** …
… the children of **key workers, in school, is … 23.3%**
… pupils in **EYFS, Year 1 or Year 6, in school, is … 20.9%**
… pupils in **Years 2, 3, 4, or 5, in school, is … 20.9%**
… **from home, is … 34.9%**:

- some teachers are **also planning, setting and marking home-learning tasks for their own classes** … they are consequently feeling guilty that the home-learning of the pupils in their own classes is not getting their full attention;

how teachers are supporting pupils' maths learning at home:

- in schools that presently have only EYFS and Year 6 pupils in school, teachers are **setting online tasks for pupils in Years 1 to 6**;
- some primary teachers are **not planning and teaching their own online lessons** … instead they are setting tasks from free material on external websites … some are **using the NCETM online videos for their pupils' home learning** because, for example, they like the use of a wide variety of concrete resources and the emphasis on precise use of ordinary language … some teachers are planning to use the videos in their school-based professional collaboration, focussing, for example, on alternative representations of ideas, and on connections within mathematics … teachers are also finding that the video lessons help parents support their children's learning more effectively than do many other home-learning resources, and provide a 'great way into' the NCETM Mastery PD Materials for teachers who are just starting to use them … some secondary teachers have used the primary video lesson to help them understand how to improve pupils' experiences when they move on from Key Stage 2 to Key Stage 3;
- teachers are using **free resources from the Association of Teachers of Mathematics (ATM)**, particularly material about teaching with Cuisenaire® rods … which, for example, an Innovation Work Group of primary teachers has found to be enlightening;
- some **teachers are trying to develop their teaching further towards the kinds of engaging, exploratory approaches** that are exemplified in the (ever-expanding) collection of short **ATM 'Maths Snacks Videos'** … influencing teachers' thoughts about how they might improve tasks that they set for homework … looking to make changes in the way they teach maths throughout the whole school … in one school, teachers have created a 'Fun with maths' page which presents challenges (such as making numbers from 0 to 100 using only the digits 2, 3, 4 and 5, or creating Escher-style tessellations or tangram pictures) for all pupils in the school to try at home in addition to 'the maths set for them by their class teacher' … pupils working at home like to see their 'products' displayed online and then discuss them in online forums;
- instead of planning and teaching their own online lessons, some teachers are setting tasks from **White Rose Maths … teachers' criteria for choosing that particular external source of material include** … the extent to which the 'curriculum

progression' 'matches our in-school work', the 'helpfulness' of the language used in their videos, and the range-extent of the variety of their tasks;

- some teachers are **using Teams with Key Stage 2 pupils** to set tasks and interact with pupils … locking down the pupils' video chat buttons (in order to keep pupils 'on task');
- some teachers are **doing Zoom lessons with Key Stage 2 pupils** … some parents are sitting in on the lessons and timing them ('to make sure that the lessons are up to scratch');

how teachers have been checking the engagement of pupils with maths learning at home:

- when teachers are using Firefly, **pupils are 'showcasing' their work** by submitting their projects online;
- **using Teams** to check pupils' work … **phoning parents**;
- some teachers **use Class Dojo (which is a free online system) to 'keep on top of' pupils' engagement** … parents use Class Dojo to send in their children's work, all of which is shared online (again via Class Dojo) at the end of each day as a 'class story' … Firefly and Tapestry are other online systems that some teachers use in the same way … it is useful to have digital copies of pupils' products;

how teachers are supporting parents' interaction with their children's maths learning:

- some **teachers are creating their own guidance for parents** … provided online and including … relevant tasks, notes about how the relevant 'topic' is taught in school, possible pupils' methods, relevant knowledge, likely misconceptions and links to relevant video lessons;
- directing parents to the **NCETM's support for parents**;
- some **teachers are planning to use Zoom to host online guidance sessions for parents**.

In what follows, click on any screenshot-of-a-tweet to go to that actual tweet on Twitter.

This is a part of a conversation about using NCETM video lessons to generate learning experiences for primary pupils at home, and also to prompt insights during the pedagogical discussions of both primary and secondary teachers. The conversation was generated by this tweet from Mark Williams:

and included these from Mark Williams and Martyn Yeo:

Mark Williams @markuk73 · Jun 30
Replying to @markuk73
#mathscpdchat They liked aspects of both - many prefered the @NCETM use of concrete resources and emphasis on language, but others liked the @WhiteRoseMaths use of bar models and reasoning / stem sentences.

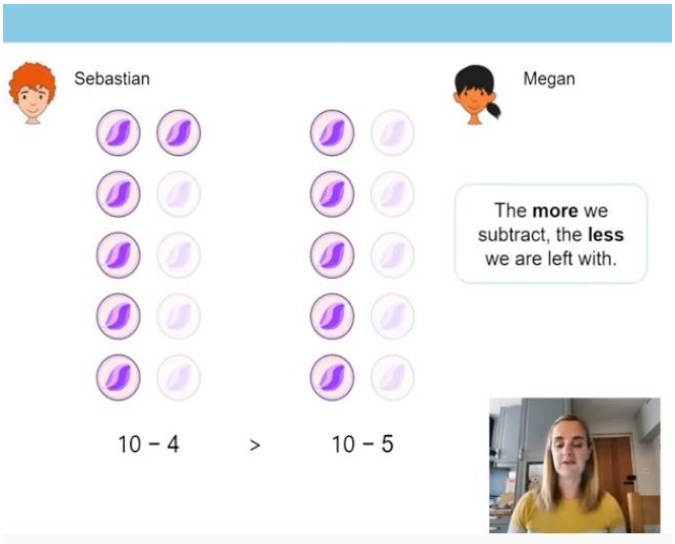
Martyn @martynyeouk · Jun 30
Replying to @markuk73 @NCETM and @WhiteRoseMaths
It is tough as they all have pros and cons! #mathscpdchat

Mark Williams @markuk73 · Jun 30
Yes. Also think they may be useful in school for CPD - looking at representations and making connections. White Rose slightly too task led in my opinion.
#mathscpdchat

these from Mark Williams, Mary Pardoe and Ruby Judge:

Mark Williams @markuk73 · Jun 30
Replying to @PardoeMary @NCETM and @WhiteRoseMaths
They are also a great way into the Mastery PD Materials, an amazing sequence of mathematical teaching steps. All the lessons are based on ideas from the PD Materials, and I plan to introduce them to my schools in September.
#mathscpdchat

Mary Pardoe @PardoeMary · Jun 30
Yes ... and the lessons are taught by various different, very friendly, experienced primary teachers (who always stay on the screen!) ... with some very memorable visual images ... e.g. ...



Mark Williams @markuk73 · Jun 30
Yes, read some articles that suggest that seeing the teacher aids comprehension. @OakNational lessons also do this.
#mathscpdchat

and these from Director of Maths and Ruby Judge:

(to read the discussion sequence generated by any tweet look at the 'replies' to that tweet)

Among the links shared were:

Firefly Platform which is a digital platform (founded by two GCSE students, Joe Mathewson and Simon Hay) which is used by some schools in order to enable students, teachers and parents to interact and share information. It was shared by MrHawesMaths

Class Dojo which is a school communication platform that enables teachers, students and families to share what is being learned by students through photos, videos and messages. It was shared by Martyn Yeo

Rebecca The Maths Lady which is Rebecca Hanson's YouTube channel. The link takes you to a short video in which Rebecca introduces the *RebeccaTheMathsLady* YouTube channel to parents. It was shared by Martyn Yeo

Corona Conundrums which is a collection of very short videos in each of which Chris Smith entertainingly and clearly sets up a different mathematical puzzle. It was shared by Chris Smith

Maths 4 Kids - new video every Wednesday which is a new YouTube channel run by two teachers whose daughter, Amber, introduces a new maths topic each week. The videos are intended to help pupils, suggest teaching ideas, and help parents understand methods. It was shared by Maths 4 Kids

NCETM support for teachers and parents dealing with coronavirus measures which is where you will find resources, including many sequenced video lessons, which have been carefully created to help keep maths learning going. It was shared by Mary Pardoe

Free ATM Resources which is where you will find a wide range of interesting free resources from the Association of Teachers of Mathematics (ATM). All these materials can support and enhance the teaching and learning of mathematics, and together they address the learning of pupils of all school ages. It was shared by Mary Pardoe

Maths Snacks Videos which is an ever-growing collection of short videos from the ATM in which mathematics education experts share unusually interesting ideas to effectively support and enhance pupils' learning. The whole collection provides a mixture of engaging tasks, puzzles, challenges and games. It was shared by Mary Pardoe

Mathematical Journeys - Departure Points, e-book which is an ATM collection of starting points for mathematical exploration suitable for a wide range of ages and attainment. It was shared by Mary Pardoe

Transition Talks: Issue #1 which is a document containing articles to support teachers in providing a happy and beneficial transition from Key Stage 2 to Key Stage 3 for all pupils. It was shared by Mary Pardoe