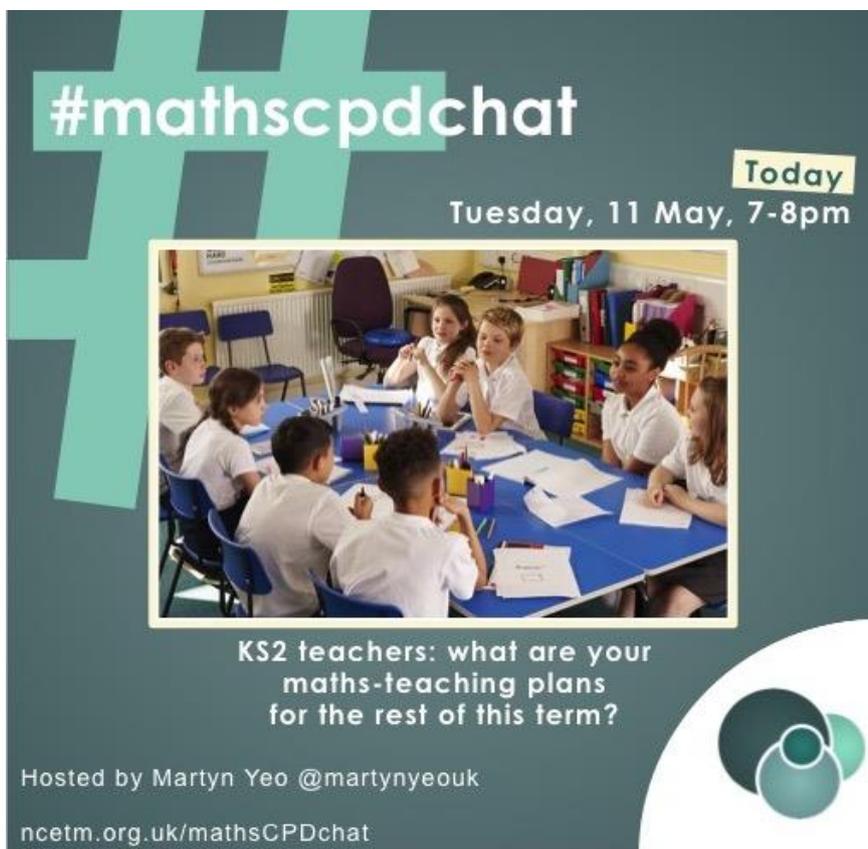# #mathscpdchat 11 May 2021

KS2 teachers: what are your maths-teaching plans for the rest of this term?
Hosted by Martyn Yeo

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

Among the links shared during the discussion were:

Curriculum Prioritisation in Primary Maths which is NCETM guidance about what maths to teach for the rest of 2020/21. It was shared by Martyn Yeo, Alison Hopper and Tazreen Tershanah

Exemplification of ready-to-progress criteria which is NCETM material consisting of 79 PowerPoints, each one focusing on one of the ready-to-progress criteria in the DfE maths guidance for KS1 and KS2. The PowerPoints include links to relevant resources and pupil-facing activities. It was shared by Alison Hopper

Chocolate which is an activity, documented and presented by NRICH, in which pupils act according to their own decisions about which table(s) to sit at in order to receive a (calculated-in-their-heads-by-them) share of chocolate. The challenges of the real situation help pupils develop their concepts of fractions. It was shared by Sharon Malley

Fractions as division: the forgotten notion? which is an article by Doug Clarke in which he describes one way in which he has used the Chocolate activity with teachers and middle school students. It was shared by Sharon Malley

Fraction stories: Multiple Representations which is a free-to-download task designed by Chris McGrane for late primary, early secondary pupils, with a related blogpost by him. The author could imagine using the task to establish the extent of pupils' understanding of fractions on arrival at secondary school. It was shared by Sharon Malley

The screenshots below, of chains of tweets posted during the chat, show two linked conversations between primary and secondary teachers about the importance of continuity of pedagogy, as well as of content, from KS2 to KS3. **Click on any of these screenshots-of-a-tweet to go to that actual tweet on Twitter.**

The conversations were generated by these two tweets from Martyn Yeo:

Martyn (He/Him) @martynyeouk · 21h

Q2
What are you thinking about transition?

How are you getting pupils for next year?

Is there anything you are putting in extra?

Or taking out?

#mathscpdchat

The NCETM and 3 others

Martyn (He/Him) @martynyeouk · 21h

Replying to @martynyeouk

We are creating a document to show what we have covered this year (we did the same last year) and gave it a level of how well it was covered to help people know what might need more time next year....
#mathscpdchat

and included these from Alison Hopper, Martyn Yeo and Gemma Scott:

Alison Hopper @AlisonHopperMEI · 21h

Replying to @martynyeouk

Do you include an bit on how it has been taught? That is the discussion that has caused "Cross phase enlightenment" (I love that phrase soooo much!) in the #Y58Continuity work #mathscpdchat

Martyn (He/Him) @martynyeouk · 21h

Replying to @AlisonHopperMEI

Thats a great idea - maybe explain which models have been used as part of the transition #mathscpdchat

Director of Maths @DirectorMaths · 21h

What a wonderful phrase! We have been working hard on this, so much confusion can be caused between phases and years when "new" methods are taught that don't take into account prior understanding #mathscpdchat

Martyn (He/Him) @martynyeouk · 21h

Do you have a calculation policy to help with this? #mathscpdchat

Director of Maths @DirectorMaths · 21h

Yes and no, we have the prior knowledge atoms listed in the SoL so the best example is probably multiplying decimals. We have agreed we want them to see multiplying by 10/100 then divide at the end but the method they use to multiply the integers isn't specified #mathscpdchat

Director of Maths @DirectorMaths · 21h

So as long as the students have a firm understanding of the pre requisite we are happy. If not the atoms tell them where to go back to #mathscpdchat

Martyn (He/Him) @martynyeouk · 21h

Can you explain more about what "atoms" are please #mathscpdchat

Director of Maths @DirectorMaths · 21h

So they are pieces of prior knowledge that the students need to have in order to be successful in the new bit. For example multiplying integers and multiplying by powers of 10 when multiplying decimals. Ours have largely come from the ready to progress criteria #mathscpdchat

Martyn (He/Him) @martynyeouk · 21h

That makes sense - so you have created these from those statements as a school? #mathscpdchat

Director of Maths @DirectorMaths · 20h

Yes, we still have some work to do but we have found them particularly useful for mixed attainment Year 7. Identifying a gap can help staff to go back to a stage appropriate resource #mathscpdchat

Alison Hopper @AlisonHopperMEI · 21h

That sounds good. Knowing the way things have been represented and talked about can improve continuity in pedagogy and also highlight places where there is going to be a change and make it a smooth one. #mathscpdchat

and these from Sharon Malley, Tazreen Tershanah, Alison Hopper and Martyn Yeo:

Sharon Malley @mathsmumof2 · 21h

Replying to @martynyeouk @NCETM and 3 others

I had a great chat with the @emsmathshub #y5to8continuity workgroup today. The secondary colleagues recommended to the primary teachers that the use of a fraction bar for division and confidence is n leaving answers as fractions was important. #mathscpdchat

Tazreen Tershanah @tershanah · 21h

Replying to @mathsmumof2 @martynyeouk and 5 others

#mathscpdchat that would be a great opportunity to relate their understanding of fractions and division. Thanks.

Sharon Malley @mathsmumof2 · 21h

Some resources we found to use were @nrichmaths nrich.maths.org/34/note #mathscpdchat

Chocolate

There are three tables in a room with blocks of chocolate on each. Where would be the best place for each child in the class to sit if they came in o...

🔗 nrich.maths.org

Alison Hopper @AlisonHopperMEI · 21h

This is a great resource. I've used it to introduce the idea of fractions as division. Pupils need to have an understanding of comparing and ordering fractions. If you promise them their share of the chocolate, it certainly encourages their reasoning! #mathscpdchat

Martyn (He/Him) @martynyeouk · 20h

These transition workgroups sound like they are being very enlightening!

Any other pearls of wisdom?
#mathscpdchat

Sharon Malley @mathsmumof2 · 20h

Year 6 need to get used to using a calculator, they will be allowed to use a pen and not have to do joined-up handwriting! #mathscpdchat

Alison Hopper @AlisonHopperMEI · 20h

#CalculatorCrunch is happening again this year and there will (by the last half of term) be 5 linked Y6 and 7 #GetCalculating lessons that schools can use to promote calculator use and possibly as part of a transition project to support maths #mathscpdchat

Tazreen Tershanah @tershanah · 20h

#mathscpdchat
A good starting point might be a number track. E.G. a circle with numbers like 7, 28, 4, 16 16, 1
and the children have to start by typing in 7 on their calculators and divide/multipliply to get to the next number on the track.

Alison Hopper @AlisonHopperMEI · 20h

I like that! @tershanah Would you be happy to have a version as part of #CalculatorCrunch? I'm always looking for new puzzles to include! #mathscpdchat

Tazreen Tershanah @tershanah · 20h

#mathscpdchat

Ofcourse! I can't remember exactly where I got it from so not sure who to give credit to there. It is extremely interesting with the same number side by side or 1. The best part is that it is a continuous circle so they have to get back to the starting number.

Martyn (He/Him) @martynyeouk · 21h

Ahhhh, connections being made! That's what #mathscpdchat is all about!

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

There were a few tweets in response to the following poll, which was tweeted by the host at the start of the chat, and which asked whether KS2 teachers are planning to try to 'cover' as much mathematics as usual this term:

Martyn (He/Him) @martynyeouk · 20h   ...

Let's start with a poll to get us thinking

What are your maths teaching plans for the rest of the year?
#mathscpdchat

Same as I always do ✓	70%
Less than "normal"	20%
More than "normal"	10%

20 votes · Final results

- at least one teacher intends 'to **focus on the basics' and build confidence 'in line with the DfE recommendations'** … 'not less content necessarily, but fewer representations' … the teacher is being guided by the NCETM's *Curriculum prioritisation in primary maths 2020/21* document and video (link provided above).

Other areas where discussion focused were:

the host's first question asked what is different (to 'normal') in KS2 teachers' practice this term, and what is the same:

- a secondary teacher asked whether there is **'anything you won't be doing as much of this year that might impact us at secondary'**;

- some primary teachers commented that they are teaching the same topics as in any year, but are actually doing more **'as we have to go back over things from last year'** … some commented that they were having to **'slow down'** … for example a teacher felt that pupils needed 'to crack equivalents' (equivalent fractions) 'before we can move on to ordering' (them);

- a KS2 teacher suggested that **'perhaps some materials with small steps aren't accounting for big gaps from related foundation topics, such as division'**;

- a primary teacher wondered whether other KS2 teachers were finding that presently 'there are fewer opportunities for extended problem solving' (in Y5/6) … that teaching KS2 pupils some **problem-solving and mathematical reasoning skills and strategies may be what is presently being left out**;

although most of the discussion generated by the host's second question is represented above in the two sequences of tweets shown, a few other points were discussed:

- when a secondary teacher shared some **materials that primary and secondary teachers working together in a Y5 to Y8 Continuity Work Group have found to be useful** (for example, *Fraction Stories: Multiple Representations* … link provided above), a KS2 teacher

commented that it reminded her of a **learning 'model' summarised as 'build it, say it, draw it, write it'**;

- teachers in a cross-phase, Y5–Y8 Continuity Work Group had also **discussed recent Twitter conversations generated by this tweet**:
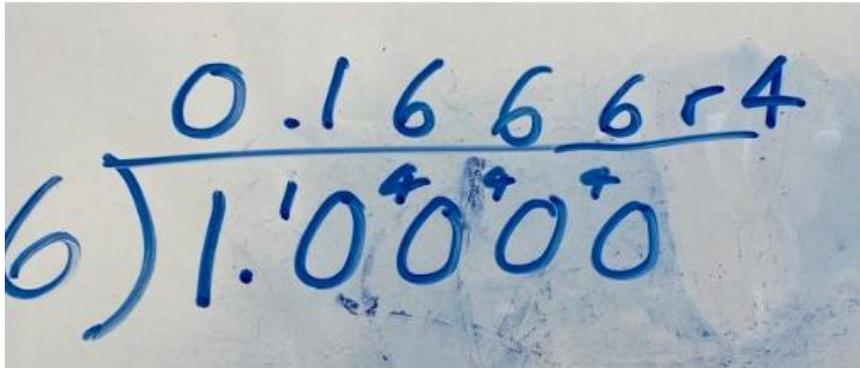
- there was also a brief discussion about **whether the written products of KS2 pupils' maths learning ought to be created by them using pens or pencils, and in 'joined-up' handwriting** … a primary teacher commented '10-11-year-olds can easily write in pen' … a secondary teacher tweeted that **'every secondary I've worked in expects work done in pen (diagrams in pencil)'**;

having 'discussed lots about short term plans', the host ended by inviting KS2 teachers to share their long-term vision for maths teaching. There was not enough time left for contributors to frame any responses … perhaps teachers' long-term visions for their maths teaching is a possible subject for a future #mathscpdchat … anyone keen to host such a topic?