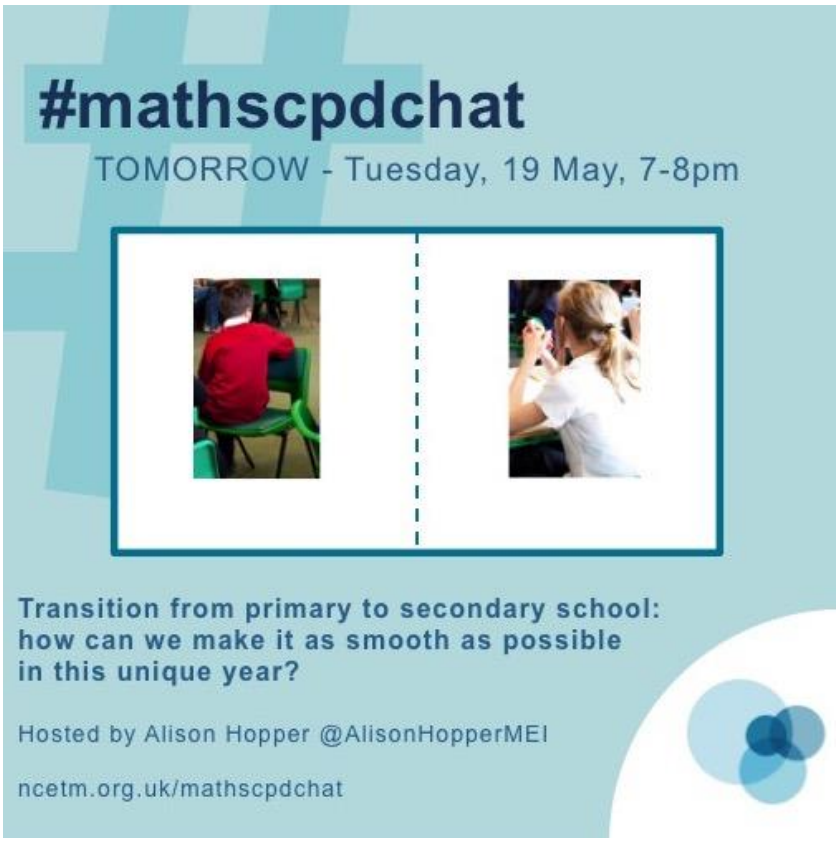
#mathscpdchat 19 May 2020

Transition from primary to secondary school: how can we make it as smooth as possible in this unique year?

Hosted by Alison Hopper

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 focused were:

- the **groups of people (pupils, parents, and/or other teachers) on which teachers will mainly focus** in their preparation of material and events designed to provide a smooth transition for pupils from Year 6 to Year 7;

- that in normal years some **secondary teachers invite Year 6 pupils into their schools to engage in mathematical activities of various kinds** … that tasks have in the past been chosen to be suitable for pupils of all attainment levels … that the planning of such events in the past has sometimes been collaborative, accomplished by **primary and secondary teachers working together** … that this year some teachers are planning to try to create **'virtual' experiences for Year 6 pupils that are as close as possible to pupils' experiences in those past events** … that teachers are considering providing videos to generate such 'remote' mathematical experiences … that they are presently looking for suitable and interesting mathematical challenges;
- **what 'virtual' transitions days might be lik**e … whether it might be possible/effective to **arrange for pupils presently in Key Stages 3 or 4 to work with Year 6 pupils in some way** (as they have done on some real transition days of mathematical exploration, that took place at either a secondary school or at one of its feeder primary schools);
- that some secondary teachers **have in their minds throughout the school year various ways of smoothing transition from Year 6 to Year 7** … that these teachers make efforts to get to know the mathematics, and understand the teaching approaches that their Year 7 pupils have experienced during Key Stage 2 … for example, secondary teachers in one school were prompted (by observing some teaching in their feeder primary schools) to explore together ways in which bar models can be used effectively to support pupils' mathematical reasoning;
- that in 'normal' years some **secondary teachers go into their feeder primary schools** during the summer term to run some lessons with Year 6 pupils … that (in 'normal' years) they plan their Year 7 teaching after studying Key Stage 2 assessment data, and information about what has been taught that is passed on to them from their feeder primary schools … that some secondary teachers are **regarding the absence of Key Stage 2 test data this year as an opportunity 'to see for themselves what their new Year 7 pupils know and can do'** … that all their 'assessment-in-order-to-see-for-themselves' will be carried out very sensitively with proper understanding of pupils' circumstances during this unique time;
- whether there are ways in which primary and secondary teachers can work together to **avoid the need to test pupils as soon as they arrive in Year 7** … that teachers' newly-acquired confidence in working together via online meetings may enable **effective cross-phase collaboration this year in ways that were not considered before the school closures** … that, because all teachers are presently coping with many changes in their ways of working, this may be an ideal time to innovate;

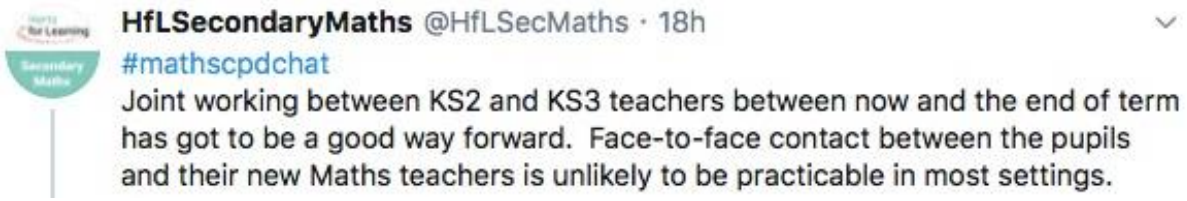
- that smooth primary-to-secondary transition has in the past **not been achieved by only running a few transition days in the secondary school**;
- that some Year 7 teachers are considering using their school Twitter account to **set mathematical challenges for Year 6 pupils this term** … that they will encourage parents of Year 6 pupils to use a 'shared mailbox' to communicate with them by email about their children's responses to the challenges;
- how to manage **communication between secondary teachers and the parents of pupils in Year 6** of their feeder primary schools;
- creating a **'maths-transition padlet' containing tasks, games and other starting points** that will engage Year 6 students now in the kinds of mathematical activity that will prepare them for mathematical learning in Year 7 … sending links (to the padlets) to the parents of Year 6 pupils … the recurring issue of pupils/parents who are disadvantaged by not being able to access online materials … that the **children of parents who feel supported** at the time of their child's transition from primary to secondary school, **are more likely themselves to feel supported**;
- that **Maths Hubs have for some time been running well-established Y5-to-Y8 transition groups** … drawing on the expertise of teachers in these groups … suggestion that some new teachers may like to join these groups in September;
- that some secondary teachers are considering **moving from 'setting' pupils for maths in Year 7 to teaching them in mixed-attainment groups** … that this consideration has been prompted by seeing that their primary feeder schools are now teaching maths throughout Key Stage 2 in 'mastery-style-mixed-attainment groups' … that some secondary schools have already moved to mixed-attainment maths teaching throughout Year 7 … that teachers noticed 'great differences' … that many more pupils appeared to enjoy mathematics, while **a small number struggled** … that mixed-attainment **teaching in Key Stage 3 requires the same kind of teaching-support that is usually provided by Teaching Assistants in Key Stage 2** … that now is a good time for primary and secondary teachers to **identify present Year 6 pupils who are likely to struggle when they start Year 7**, and to **discuss the kinds of support they are likely to need**;
- that direct transition from home learning in Year 6 to home learning in Year 7 would be **very difficult for both pupils and teachers**;
- that **secondary teachers need to know now** what primary teachers in their feeder schools have been setting for home-learning, and what they will be teaching Year 6 pupils while they are back in school during the rest of the summer term … that **Year 6 teachers need to know now what secondary teachers would prefer them to do in order to support transition**, so that the Year 6 teachers can make the best

use of the time this term during which Year 6 pupils are back in school … that a **'maths transition unit' that starts in Year 6 and continues in Year 7** would be particularly useful/helpful in this unique year … that MEI are working now to provide 'something of that kind' for teachers to use in June … that **cross-phase teamwork will effectively support the teaching of such a 'transition unit' and the resulting learning** … that it is important for primary and secondary teachers to **work together on pedagogy (teaching approaches) as well as on the mathematical content** to be learnt;

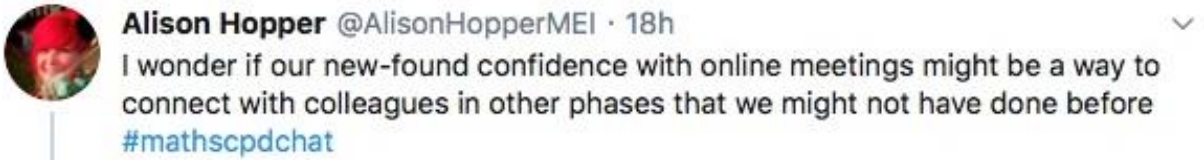
- that it is important for pupils to **see and use familiar approaches and representations when they start Year 7** … that familiar approaches will help pupils **connect new ideas with, and so build on, their past mathematical experiences** … for example, a transition unit might require pupils to use particular mathematical tools and manipulatives … that in the past a focus on developing new calculator skills during the first term of Year 7 has enabled pupils to draw on (and reveal) their existing knowledge and understanding of, for example, the order of priority in applying numerical operations, powers, fractions, decimals and percentages;
- that some secondary schools are producing for present Year 6 pupils, videos that provide **a virtual tour of the school** … "Year 6 students, as you cannot visit our school at the moment, we have brought the school to you!";
- how to facilitate Year 6 to Year 7 transition if you are in a school that receives Year 7 **pupils from a large number of different primary schools** … inviting **teachers from all the feeder primary schools to join, together with the secondary teachers, in a big 'online chat'** … focus the discussion on questions and issues that are common to teachers from all the schools;
- **questions that primary teachers might want to ask secondary teachers** during collaborative (online) discussions … for example, "Other than times tables, with what aspects of maths do you wish new Year 7 pupils were more fluent?";
- **questions that secondary teachers might want to ask primary teachers** during collaborative (online) discussions … for example, "How do your pupils love learning maths?", "What do you want them to achieve on the next step of their maths-learning journey?";
- **questions that secondary teachers might want to ask new Year 7 pupils in September** … for example, "What topics/ideas have you found difficult to understand?", "How were you taught the topics/ideas that you find difficult?";
- some secondary teachers feel that they need, as departmental teams, to **build closer relationships with primary teachers, and work collaboratively with them**.

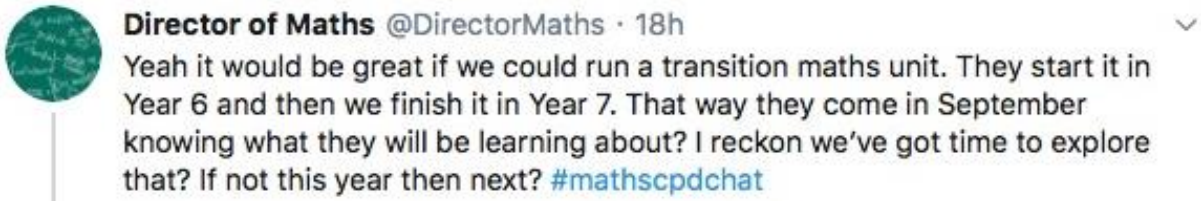
In what follows, click on any screenshot-of-a-tweet to go to that actual tweet on Twitter.

This is a part of two linked conversations. In #mathscpdchat discussions it often happens that a conversation branches out into two (or more) separate conversations. This is shown here by the repetition of two tweets. Both conversations focused on using cross-phase units of 'lessons' (that pupils start in Year 6 and continue to work on in Year 7). All these tweets were posted after the host had suggested that discussions between primary and secondary teachers could take place in online meetings. Both conversations were generated by this tweet from HfLSecondaryMaths:

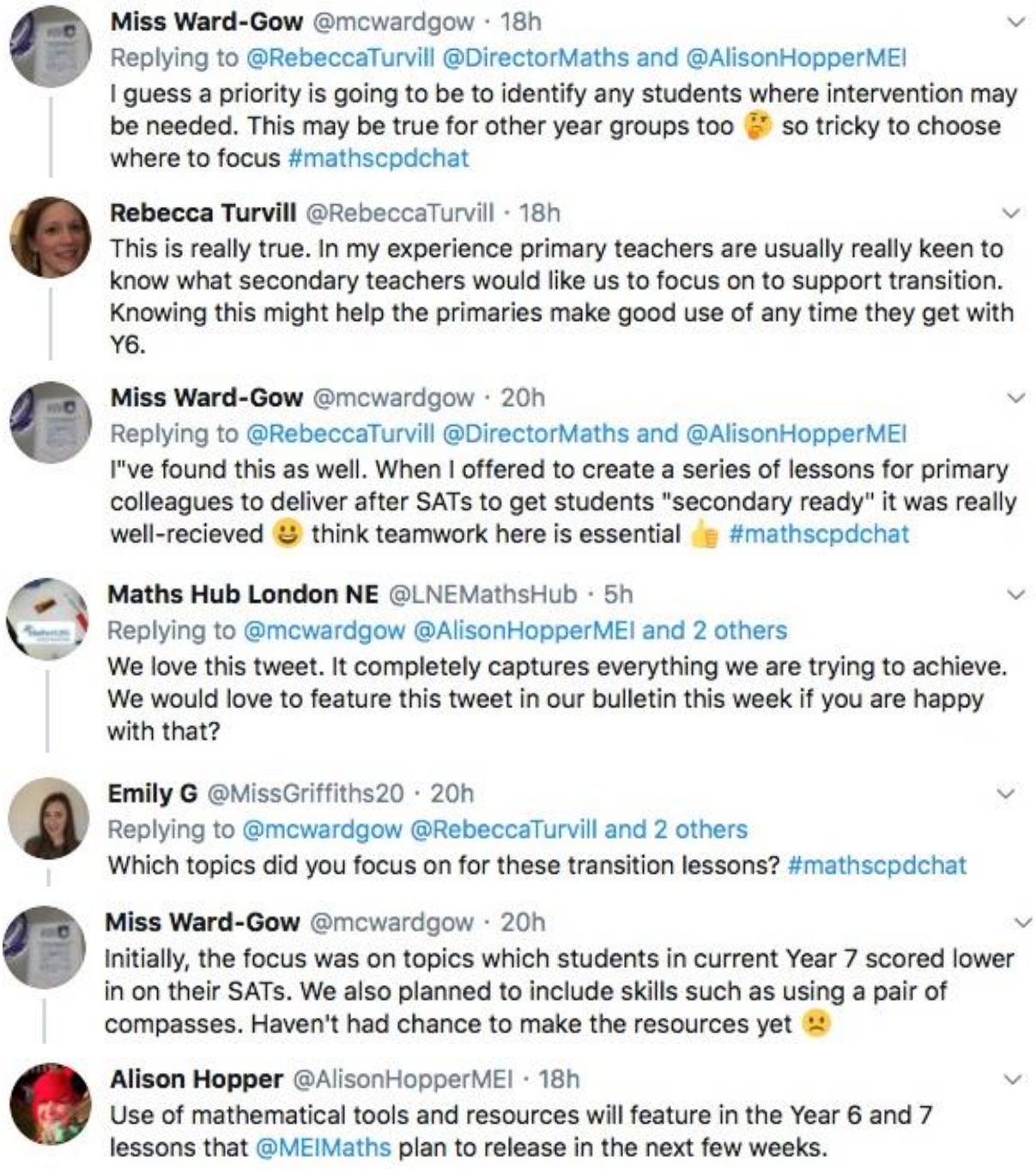


and included these from Alison Hopper, Miss Ward-Gow, Rebecca Turvill and Director of Maths:





and these from Miss Ward-Gow, Rebecca Turvill, Maths Hub London NE, Emily G and Alison Hopper:



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

Among the links shared were:

Improving Mathematics in Key Stages 2 and 3 which is a report from the *Education Endowment Foundation* that includes eight recommendations to improve outcomes in maths for 7–14 year olds. Recommendation 8 provides examples of good practice in supporting Key Stage 2 to Key Stage 3 transition. It was shared by Alison Hopper

Welcome to Maths, Year 6! which is a padlet, designed by Beckneedsadonut, of a variety of resources for Year 6 pupils that are intended to prepare them for mathematics learning in Year 7. It was shared by Beckneedsadonut

Let's get Secondary Ready which is a maths course from Sparx Learning 'that Year 6 learners can access free-of-charge to help them prepare for starting Year 7 in September'. It was shared by Miss Ward-Gow

A Year 6 Transition Tour 2020 which is a video tour of a secondary school designed for Year 6 pupils who are about to join the school as Year 7 pupils. It was shared by Alison Hopper

Free MEI Transition Resources which is where you will find the lovely *Calculator Crunch* materials that were designed by Alison Hopper for MEI, and are intended specifically to help Year 6 pupils prepare for mathematics learning in Year 7. It was shared by Mary Pardoe

Two birds - one stone which is an article from the NCETM Secondary Magazine in which a teacher describes a Key Stage 2 to Key Stage 3 mathematics transition event that was arranged and took place several years ago. It was unusual in that a key feature of the day was that the 'teachers' at the event were all pupils from the secondary school that the Year 6 pupils were about to join. It was shared by Mary Pardoe

Primary Maths Team Challenge which is an article on the NCETM website which describes how, in the past, a group of seven primary schools, one special school and one secondary school worked together to develop 'several different transition activities in which all the Year 6 pupils take part to help prepare for a smooth transition into Year 7'. It was shared by Mary Pardoe

Free ATM Resources which is a wide-ranging collection of free resources from the Association of Teachers of Mathematics. Some of the tasks might be very suitable for inclusion in a Y6-Y7 transition unit. It was shared by Mary Pardoe

Algebradabra Week 2 Dynamic Triangles which is an interesting task by Professor Smudge from the collection of free resources from the Association of Teachers of Mathematics. It might be suitable for inclusion in a Y6-7 transition unit. It was shared by Mary Pardoe

Playing Around With Numbers which is an unusual task by Mike Ollerton from his own collection of free resources. It might be suitable for inclusion in a Y6-7 transition unit. It was shared by Mary Pardoe