**Supporting the learning of Mathematics at home.**

**Older children**

Older children’s work at home is likely to be more closely linked to the mathematics recently studied in the classroom. When working with older children at home, parents are often faced with an additional challenge – that of mathematical subject material that they themselves may not have used for many years, or methods with which they are not familiar.

For this reason, much of the evidence about supporting older children with mathematics is about structure, encouragement, and routines.

Given support routines can prove so helpful, here are some ideas to share with parents:

* Create a **daily routine** for mathematical practice with your child and reinforce this with praise and rewards. This can increase the amount of time spent ‘on task’ and improve the effectiveness of how that time is spent.5You might want to consider linking this routine to the rhythm of a normal school day, but be realistic in what you can manage as a family.
* Encourage your child to **set goals**, plan, and manage their time, effort, and emotions. This type of support can help children to regulate their own learning and will often be more valuable than direct help with mathematical tasks. As children become older, more independence can be expected but support will still be needed.
* Having a **place to study** mathematics is helpful. This could be a desk in a bedroom or a place at the kitchen table. Ensure your child has the materials they need. Whatever they may tell you, a notebook and pen will always be needed for working out (even when tasks are online). Also, a calculator (scientific whenever possible), and a ruler as a minimum. Some tasks set by schools may need online access, and a laptop or tablet will usually be better than a mobile phone.

Away from providing structure, there are some tips for engaging in mathematical content with older children at home:

* Many children enjoy **practising times tables** either online or on paper. There is value in this: evidence shows that pupils need to develop a fluent recall of mathematical facts, and times tables are among the most important of these.6
* It can be difficult to learn new mathematical content away from the classroom, but evidence suggests that we should provide **opportunities for children to retrieve** the knowledge that they have previously learnt.7Parents should encourage practice of previously studied content. This might be via an online learning platform - a textbook - or simply revisiting questions from their school exercise book.
* When attempting to engage with new content, providing **worked examples** of concepts is likely to be beneficial.

If parents don’t feel confident providing these, schools should consider sending these home, either via email, an online learning platform, or in the post. A good worked example should show all steps clearly, be annotated, and provide a very similar follow-up problem for children to try.