

## **KS2: Useful tips for parents to support maths at home**

In 2011, Ofsted stated that parental engagement has a clear impact of achievement in school for pupils. They also noted how children have higher attainment levels and are more likely to achieve academically when parents are involved with their education.

This resource contains some ideas of how you, the parent, can help: engage the children with maths at home, and improve their outlook on mathematics in general.

We know it can be difficult to know, as a parent, how to start supporting your child with maths at home. We understand that the way the maths curriculum is structured and taught may differ from what some parents remember from their own school experience. Consequently, some parents may not feel confident about how best to support their child with maths at home. We encourage a positive mindset towards maths which helps to foster engagement in the subject.

Teachers often link maths learning back to the real-world, when it is appropriate. There are many opportunities to develop your child's maths skills in real-life. For example, in the supermarket, ask them which item is cheaper and to explain how they know. When asking your child about their day, use vocabulary such as earlier, later, before and after to help develop their sense of time.

We hope this resource is helpful and gives some useful ideas about how to support your child's maths learning at home. If you would like to discuss your child's maths learning, please contact your child's maths teacher.

## Tips to engage with your child's maths learning:

- A positive mindset

Do you ever hear yourself saying, "I'm really bad at maths," or, "I just didn't get maths at school"? Children can pick up on any negativity towards particular subjects from the adults in their lives. Unfortunately, this can be a real barrier to learning. We encourage parents to try and use positive language around their children when discussing maths. If your child makes a mistake, it can be turned into a learning opportunity:

\*Where did you make the mistake?

\*How can you improve it?

\*What will you do instead next time?

- Play maths games together

Games are a great way to bond with your child; many games use mathematical and logical skills that your child will need later in life. A jigsaw puzzle helps children to develop logical and spatial awareness. Connect 4 also supports logic in terms of where the best position is to place the disc and to think strategically ahead. Board games with dice, scrabble and chess also support the development of your child's maths skills.

- Develop memory skills

Children now have little need to memorise things such as phone numbers. Try to encourage your child to memorise your phone number/their own phone number/car number plate/postcode to help develop their memory skills. This can be turned in to a game:

\*The second number is three more than 5. What is the number?

\*What is the sum of all of the digits added together?

\*Write the number so that digits are descending/ascending.

Encouraging your child to know their date of birth, family birthdays and ages helps them to understand time:

\*Who is older/younger?

\*By how many years is \_\_\_\_ older/younger than \_\_\_\_?

\*How old will you be in two years?

\*How old were you three years ago?

- Practise reading the time

As the world becomes increasingly digital, many children are growing up less exposed to reading analogue clocks. Reading analogue clocks is part of the maths curriculum so opportunities to read them at home will benefit your child.

\*What time is it now?

\*What time will it be in 20 minutes?

\*I'm going to give you 25 minutes to finish that. What time will it be when you finish?

\*We need to be at \_\_\_\_\_ at 12:30pm. What time should we leave?

\*The film starts at 3:45pm and is 1 hour 40 minutes long. What time will it finish?

\*Write quarter to four in the afternoon as it would be written using the digital clock.

- Use fractions in daily life

There are many opportunities to use fractions in real-life:

\*If your family are sharing a pizza or cake, what fraction is everyone going to receive?

\*By pouring water in to a glass/jug, what fraction of the glass/jug has been filled?

\*See a window split into four coloured panels? Ask your child, "What fraction of the window is coloured blue?"

\*Colour in flagstones in your garden using chalk and ask, "What fraction of the flagstones are red?"

When practising fractions in this way, it is important that the separate parts of the fraction are the same size.

- Multiplication tables practice

It's essential for children to learn their multiplication tables to access all areas of maths so that they can make conceptual links between the different areas: regular multiplication tables practice will help with this.

Children also need to know the division facts for multiplication tables so ask, "What is  $42 \div 7$ ?" as well as, "What is  $6 \times 7$ ?" Can your child say the multiplication tables backwards?

It is an expectation in the national curriculum that, by the end of year 4, children can recall multiplication and division facts for multiplication tables up to  $12 \times 12$ .

All KS2 children have a log-in for Times Tables Rockstars:  
<https://trockstars.com/>

- Involve them with problem solving

Opportunities arise in day-to-day life at home where you could involve your child in problem solving.

Encourage your child to help you work out which is the best deal: buy one get one free or three for two. If an item is reduced by 30%, what is the sale price? Which internet provider is offering the best value? Opportunities to use maths skills in real-life will support their learning and understanding of those skills.

- Use open questions

Explaining why a certain method is more efficient than an alternative method to solve a problem, or being able to explain how an answer was calculated mentally, are just some of the elements that help children to develop their reasoning skills in maths. It also supports their use of mathematical language.

\*Why did you use that method?

\*How did you calculate that answer?

\*How do you know the answer is correct?

\*Show me another way that you could have solved that problem.

\*What did you already need to know to help you answer that question?

Questioning supports your child's use of mathematical language.

