

Helping your Elder child with maths



As your child moves to becoming a fluent mathematician doing quite complex maths, it is not always clear – especially to parents who are not confident mathematicians! – how to help. The fact is that parental help is still crucial at this stage. Here are some suggestions on ways to help your child at home.

Maths around the home

Measure ingredients/set the timer together when you are cooking. Talk about units of measurement how to double quantities in a recipe.

Talk about proportion when you make a cup of tea or squash – how much milk? How much water?

Talk about the shape and size of objects – use the internet to find interesting size facts like tallest and shortest people, or biggest and smallest buildings etc.

Talk about time - for example, what time should they leave the house to be at school on time? How long does the journey take? Use bus and train timetables to check journey times etc.

Play sport - Sports are the perfect chance to talk about speed, scores, time and angles. Get competitive - try out different angles to try and score from. How many star jumps can they do in a minute? How many goals/tries/conversions/points/runs has your team scored this season?

Ask them to give you directions to local landmarks/important places. How long does each stage of the journey take?

Use newspapers and talk to your child about percentages in special offers, the probability in the weather reports, the length of TV shows in the TV guide, and compare the salaries in the jobs section.

Solve maths problems at home, e.g. ‘We have 3 pizzas cut into quarters, if we eat 10 quarters, how many will be left?’

Talk about shape, size and quantity – use the internet to find interesting size facts like most and least populated cities, highest mountains or deepest valleys.

What skills are we practising?

Measuring, counting, addition, subtraction, multiplication, division, fractions, estimation, handling data, comparison, pattern, order, problem solving, reasoning, shape...and more.

Maths and Money

As your child understands more about money, you can use it to develop their maths. This helps their personal finance skills too.

If you or your child has a mobile phone, use it to talk about maths and money saving. Look together for the best phone contracts/pay as you go plans. Does the network sell any extras that would make texts or calls cheaper?

At the shops - if you're buying a couple of items in a shop, ask them to work out how much they will cost. As a challenge for older children, ask them to try and estimate what the weekly shop will come to. Ask them to check change for you. Work out offers in supermarkets together - are they worth it?

If you give your child pocket money, use this as an opportunity to talk about maths – are they saving for anything? How much do they need to save each week to buy it in a/two/six month(s)?

When you travel somewhere, ask them to help you work out whether it's cheaper to drive or take public transport.

Talk to them about getting a bank account and look together for the best joining deal.

What skills are we practising?

Identifying shapes, adding, subtracting, multiplying, dividing, numbers in between whole numbers, place value, counting, estimating, comparing, checking, reasoning, problem solving...and more.

Games

Have fun with maths! Games can really help children's maths. Adding dice scores, playing dominoes, track or card games all help children's numeracy.

Play games with cards – players take 2 cards and add the numbers - the player with the highest number wins. You can play this game with subtraction, multiplication, and division too.

Board games are great for developing skills. Try games like Connect 4, Jenga, Monopoly, Scrabble, Dominos.

Play short memory games in the car or on the bus – first person to add 2 or 3 car numbers to make 100 is the winner! Or 'Think of a number' – you think of a number between 0-100, and they have to guess. They can ask questions like 'is it less than 20?'

What skills are we practising?

Counting, relationships between numbers, adding and subtracting, multiplication and division, estimating, shape and measure, sequences and patterns, reasoning, problem solving...and more.

Learning number facts: Make sure your child knows their basic number facts off by heart. If children know that 6 is $5 + 1$, or $4 + 2$, or $3 + 3$; and that 10 is $5 + 5$ or $4 + 6$ or $3 + 7$ or $2 + 8$ or $1 + 9$ they will also know that $24 + 6$ is 30, that $510 + 90$ is 600 and that $£1.24 + 6p$ is $£1.30$ – all essential to being a confident calculator! Children can use calculators to check answers or do solve more complex problems.

Tables and more tables... It is as important as it ever was that children learn their tables. Follow these simple rules for best effect:

Make sure your child can not only recite their times tables (one six is six, two sixes are twelve, etc.) but that they can answer random questions, e.g. 'what are four sixes?'

Test them by asking division as well as multiplication facts, e.g. 'what is 64 divided by 8?' as well as 'what are eight eights?'

If they don't know a fact, have they tried 'turning it round'? So they might not remember five sevens, but they will almost certainly know seven fives. You can always 'turn round' a multiplication $5 \times 7 = 7 \times 5$.

Another easy technique is doubling up. If they can't remember four sixes, try four threes (12) and double it. This works for the 6x table and the 8x table (double 4).

Use some simple mnemonics. E.g. $56 = 7 \times 8$ or five, six, seven, eight to remember this fact!

Golden Rules

DO give LOTS of praise. Resist the temptation to point out mistakes every time a child does a 'sum' wrong. Children need encouragement to be confident, and a confident child makes a better learner.

DON'T push a skill, especially if a child is becoming confused or is feeling pressured. It pays to talk to the teacher if you feel your child is not understanding something, rather than confuse them further by teaching them in a different way.

DO play games! The evidence shows that children who play games do better at maths!

DON'T force workbooks on your child. They will do plenty of writing in their maths books at school. At home, it is great to help them memorise number facts and to practise doing simple calculations in our heads.

DO 'little and often'! For example, talk about the maths you are doing when cooking or down the shops. Play a times tables game as you drive to school.

DON'T stress written sums laid out as you used to do them! Nowadays it is the development of what we call 'numerical fluency' that counts. Children need to be comfortable with numbers, to understand how they work and to be confident in doing mental calculations.

Refer to the school's Calculation Policy to help your child remember how to do calculations.