

Helping your child at home

Mathematics is a creative and highly inter-connected subject. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. **National Curriculum 2013**

Getting children to help out with the maths you do in everyday tasks will enable them to make links between what they learn in class and its relevance in everyday life. Involve your children in weighing out ingredients in the kitchen; ask them to help with adding up the shopping bill or how much change they will get back. These simple tasks will help them to see the everyday application of maths and support their learning.

More examples of how to support your child are listed below:

Counting and Ordering

Play 'how many' games- "how many apples in the fruit bowl?" "How many if I eat one?"
Play sorting games- "place all the oranges into this bowl and the apples into this one. How many are in each?"
Ordering objects – "put these tins in order, the smallest here and the biggest here."

Ask children to set the table and let them collect the right number of knives and forks.

Talk about what numbers mean when they appear in everyday situations such as signs, adverts, on a clock face, a flat or a house number.

Time

Encouraging your child to learn to tell the time (on both digital *and* analogue clocks) provides them with an invaluable life skill. Discussing journey details and looking at bus and train timetables helps children to see the value of good time-keeping. "What time is the next bus due?" "How long will it take to get to our destination?"

Money

With the increase in contactless payment devices, children are handling less and less *real* money. Knowing the values of coins and how much change they should expect when paying with cash will empower your child to feel confident budgeting and spending money.

Estimating how much several items will cost by rounding their values will help children to stay in budget. "If I only have £5.00, I can buy five packets of these 99p crisps, because 99p is nearly £1.00 and I will get 5p change.

Include your child in decisions around household finances. "Which one is best value?"
"Do we need to switch our energy provider?" "Where could we make a saving?"

Monopoly is a fun whole family game involving handling money in hundreds.

Give your child responsibility for their own money. Open a bank account for them allowing them to track their savings.

Measurements

Cooking and baking is a hugely enjoyable way to get children confident with estimating mass and volume. Feeling the mass of flour in a bag will give children a sense of what a kilogram means and make a connection between 500g and 0.5kg being half of this amount.

Reading the volume of milk from a jug will help children to read scales.

Mixing ingredients together is the beginning of understanding ratio and proportion in Upper KS2: if I need 200g of flour for 4 cupcakes, then I will need 400g for 8 cupcakes as both amounts have been doubled.

Ask them to read the dietary information on various foods and ask: “how many grams of fat in 100 grams of ...?”

Shape, patterns and designs (geometry)

We are surrounded by so many different and exciting shapes. Spotting squares, triangles, rectangles and other polygons in real life can help to strengthen your child’s ability to identify shapes.

Counting or calculating how many tiles are on a bathroom wall shows them how area is applied to real life.

Measuring their own height in metres and centimetres and comparing it with your height will have them calculating the difference in a meaningful and motivating context: “only 1.5m until I’m your height auntie!”

Number fluency

Underlying a real love of maths is the development of ‘**numbers sense**’ a confidence in calculating fluently, which involves applying mental arithmetic accurately and quickly, but also intuitively knowing if answer feels right or wrong.

When children are freed up by knowing their times tables or number bonds, they can spend more time spotting patterns and exploring.

Some key areas of number fluency are:

- knowing one more and one less than a number
knowing times tables to 12×12 (by the end of Y4) including related facts e.g.
- $4 \times 6 = 24$ $6 \times 4 = 24$ $24 \div 6 = 4$ $24 \div 4 = 6$
- knowing number bonds to 10 (0-10, 1-9, 2-8, 3-7, 4-6, 5-5)
- knowing time conversions: 1h = 60 minutes, $\frac{1}{2}$ hour = 30 minutes, $\frac{1}{4}$ hour = 15 minutes, $\frac{3}{4}$ hour = 45 mins, 1 year = 365 days, 1 year = 12 months, 1 day = 24 hours, 1 hour = 60 minutes, 1 minute = 60 seconds
- knowing measure conversions: 1kg = 1000g, 1l = 1000ml, 1m = 100cm, 1cm = 10mm
- knowing equivalence in key fractions, decimals and percentages e.g. $\frac{1}{2} = 0.5 = 50\%$, $\frac{1}{4} = 0.25 = 25\%$

Tips for helping at home

- Find time to show an interest in what your child is learning at school
- Encourage your child to work hard and praise when they've made an effort
- Encourage reading for pleasure by reading to or with your children at night. This will help with all subjects including maths
- Create a time for learning at home that fits into the daily routine
- Find a place for your children to learn where there are no distractions

Embrace Technology

Tablets have revolutionised home learning and children love using them. They're easy to use, engaging and they're portable so children can learn anywhere. There are a lot of maths apps out there so it's worth finding out which are educationally beneficial.