

Primary 4-7 Maths – How to Help at Home

Time

Reinforce telling the time at home using an analogue and digital clock/watch to learn both methods of telling the time.

Discuss start and finish times and time durations e.g., when will this programme end? How long will the film last?

Reading of timetables (trains, buses, sports centre programme, television schedule) and calendars.



Money



Work with money in real-life situations wherever possible, for example:

- Discussing value of different notes and coins including foreign currency
- Using a piggy bank or a bank account
- Adding up birthday or pocket money
- Calculating change
- Finding the cost of several items using till receipts
- Estimate the cost of the final bill by mentally adding

Measurement - Length, Weight and Capacity



Practise estimating and measuring lengths of everyday objects using mm, cm and m with measuring tapes.

Allow your child to weigh and pour the ingredients when baking or cooking. Use this as an opportunity to involve fractions (e.g., quarter of an apple, half empty) and convert between units of measure. (e.g., 500mls is $\frac{1}{2}$ litre).

When shopping or at home, ask how much something weighs (e.g., an apple, a bag of sugar) and allow them to feel the weight, ask how short/long something is (e.g., height of the door, area of the living room carpet, or the capacity of volume containers).

When driving, talk about how numbers help us determine how fast we drive, the distance travelled, mileage the car gets per gallon of fuel, and how long it will take to get home.

Shape



Try to use the correct terminology when discussing flat shapes (2D) and solid shapes (3D) e.g. circle/sphere, square/cube, rectangle/cuboid, triangle/pyramid.

Match them to everyday objects: cube-Oxo cube, cuboid- cereal box, cylinder-can, sphere-tennis ball.

Notice tile shapes that fit together.

Pull apart empty food boxes to create nets and try to identify which 2D shapes are used to make them.



Fractions

Point out and talk about fractions when they naturally come up (e.g., “We’ve done $\frac{3}{4}$ of our walk” or “You’ve eaten half your sandwich”). Use coins to talk about parts of a pound (e.g., 50p is $\frac{1}{2}$ of £1) or find $\frac{1}{3}$ of your pocket money. Discuss fractions in the context of time (e.g., 15 minutes is $\frac{1}{4}$ of an hour).

Use real-life situations of cooking, baking and sharing food. Talk about how $\frac{1}{2}$ is smaller than 1, or how two $\frac{1}{2}$ cups make 1 whole cup. Cut pizza, fruit, or cake into equal parts. Ask questions like “If we cut this into 4 pieces and eat 1, what fraction is left?”

Give simple problems, e.g., “If you eat 2 out of 8 slices of pizza, what fraction have you eaten?” Help them draw or write down their thinking.

Practical Ways to Support Number

Rolling Numbers

Please watch the video of some of our children rolling their numbers on our website. We introduce this in Primary 3 and it is a catchy way for children to remember how to 'skip count'. It is important, that they use their fingers. This helps them to 'count' to work out a multiplication fact if they can't recall it from memory.

Top Trumps



These are a brilliant way for children to practise saying numbers aloud. Sometimes they go into the tens of thousands and millions, and some use decimals and numbers less than 1. This is a great way for children to understand place value and to recognise, in a game setting, if a number is greater or smaller than another given number.

Chatterboxes

Chatterboxes are a fun way to practise tricky maths. Put the concepts or questions that you need to practise on the inside.



Playing Cards

Playing cards are a great way to practise recall of times table.



Simply turn over two cards and multiply the 2 numbers together. You can take turns, play solo or even race against the clock. Jacks are worth 11, and Queens are 12. The cards could also be used for number bonds, adding and subtracting.

Times Tables

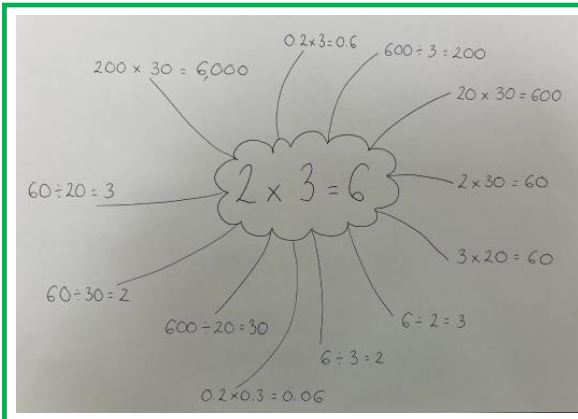
We want children to be able to recall their multiplication facts quickly, as this helps them in all areas of Maths. However, there are ways to show what times tables 'mean'. Times tables are the same as repeated addition, which we can make into 'groups of equal size' and 'arrays'. Multiplication is 'commutative' because it can be done in any order, and the 'product' is the number we get if we multiply 2 numbers together. This sort of activity can be done using objects from around the house.



Seashell array

Sometimes, simply laying out some stones or shells, rocks, beads, apples – whatever you have – can be helpful to get children thinking about the maths they can 'see'. 4 groups of 6 shells here show many mathematical ideas:

$$\begin{array}{lll}
 6 + 6 + 6 + 6 = 24 & 4 \times 6 = 24 & 6 \times 4 = 24 \\
 24 \div 4 = 6 & 24 \div 6 = 4 & \frac{1}{4} \text{ of } 24 = 6 \\
 \frac{1}{2} \text{ of } 24 = 12 & \frac{3}{4} \text{ of } 24 = 18 & 24 - 6 = 18
 \end{array}$$

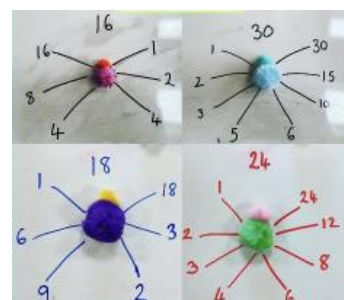


If you know X what else do you know?

This is always a simple but effective activity to do with children. Once we know one simple multiplication fact and we also know some rules about place value, we can work out many things from one simple calculation.

Factor Bugs

The words 'factor' and 'factor pairs' are sometimes difficult for children to recall and remember what they mean. Using pom poms, you can make little factor bugs to find the factor pairs. Next time they see the word 'factor', they'll remember these little factor bugs.



Point out maths in everyday life

Maths is all around us. Finding totals and giving change, reading scales, baking, time, shapes, saving, discounts, minutes, hours, weeks, days, years, months, sport, food packing, filling up at the petrol station, speed, distance, exchange rates – the list goes on. Simply finding opportunities to involve your child in the maths of everyday life will help them.



Mental Maths

Addition and Subtraction facts to 20, 100, 1000 (e.g., $45 + 55 =$, $640 + ? = 1000$)	Times tables (up to 12×12) with associated division facts
Rounding numbers to the nearest 10, 100, 1000	Counting in steps including fractions and decimals
Play a game– “The answer is ..., what could the question be?”	“I’m thinking of a whole number. It’s an even number between 460 and 470. It has 8 in the ones column.”
Recalling known facts (e.g., 1 litre = 1000mls, 5kg = 5000g, $\frac{1}{2} = 0.5 = 50\%$)	What’s the number after... 699, 1558, 98,000 What number comes before... 1800, 10,000, 5 million

Mental Calculation Strategies

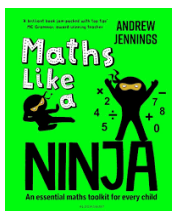
Partitioning numbers to add/subtract quickly

e.g. $63 + 27 \rightarrow (60 + 20) + (3 + 7)$

Near doubles (e.g. $51 + 52$)

Bridging through 10/100 (e.g. $48 + 7 = 48 + 2 + 5$)

Using known facts (e.g. if $3 \times 6 = 18$, then $30 \times 6 = 180$)



Book Recommendation – Maths Like a Ninja by Andrew Jennings

This is a useful guide for children and parents. It's full of the key concepts that children need to know, as well as mathematical vocabulary, terminology and easy to follow examples. Whether a child is stuck on a fractions question or struggling to remember what composite numbers are, they'll find the answer in this handy all-in-one reference guide.

Maths websites to support learning at Home



CENTURY

Century Tech - [CENTURY | Online Learning | English, Maths and Science](#) - supports your child's learning in Maths (and English and Science). It is an AI-powered online resource that tailors study material to the needs of every child. To login, children should go through their FireFly account and click 'login through Microsoft 365'.



Busy Things - <https://www.busythings.co.uk/> - The children sign in with username 'esmpupil' and the password 'esmpupil'. Children can practise Maths topics including number, addition and subtraction, pattern and shape.



Times Tables Rock Stars - <https://play.ttrockstars.com/> - The children log in using their username and password that their teacher has given them. This is the same as the one they use for Numbots.



Numbots - <https://play.numbots.com/> - The children log in using the username and password that their teacher has given them. This is the same one as the one they use for TimesTables Rockstars. Children can join in a story adventure using number concepts to compete against themselves and others to improve their speedy recall of multiplication tables.



Topmarks - [Key Stage 2 Maths - Topmarks Search](#) No login is required. Choose a category to practice skills such as counting, ordering, sequencing and explore topics on money, shape and data handling.



IXL - [IXL Maths | Online maths practice](#) No login is required. This website allows children to practice the skills relevant to their year group.



Learn the times tables here!

Timestables.co.uk - [Times tables games - Learn them all here!](#) No login is required. Here you can find a variety of times tables games that help children to practice their fluency in a fun and exciting way.



Guardians: Defenders of Mathematica [Guardians: Defenders of Mathematica – KS2 Maths game - BBC Bitesize](#) Children can practise their times tables, addition, subtraction, multiplication, division, fractions, decimals, ratio, proportion, shape, algebra and place value in this game to move through the kingdoms and defend the galaxy.