



## Helping Your Child With Maths At Home

The new maths curriculum has higher expectations overall and has been benchmarked against age related expectations in other countries. There is a real focus on number and children improving on mental maths skills. This is where you can help the most at **home** and the best way forward for **mental maths is little and often**.

**All children (from year 1) have access to the online learning platform- *Mathletics* and this provides a range of interactive learning opportunities for all areas of the curriculum.**

**It is a good idea to do 5-10 minutes of maths a day with your child. Below is a list of some of the curriculum expectations for each year group that can be enhanced with home learning. Choose one thing each day from the list below:**

### Year 1

- Counting, reading and writing numbers to 100.

Play board games with numbered squares (snakes and ladders), count all the 'cars' in their toy box, counting out loud in the car on the way to school, adult counts and misses a number out can the child guess which one? Reading the numbers on the doors on the way to school. Go on a number hunt around the house with a clip board.

- Recognise language related to days of the week, months and years.

Have magnetic days of the week children can put on the fridge in the morning. Days of the week socks or pants! Children have a calendar and cross off days as they go along.

- Tell the time to the hour and half hour.

Make sure you have an analogue (numbers on a face) clock (not just digital) in a place the children can see. Ask them at different times during the day what the hour hand says. Small teaching clocks are good for quick questions. Can you make the clock say 4 o'clock?

- Know the value of different coins.

Go to the supermarket and ask children to read out prices. Play with toy money and set up a 'shop' with empty boxes, children can set the prices and then have to find the right money to buy them. Give children pocket money (can be a very small amount e.g 50p) and give it to them in small change so they can work it out.

- Solve practical problems with length, height, weight/mass.

Helping in the kitchen is the best for this. Cooking and making cakes and biscuits, measuring liquids, putting different items in order of how heavy they feel.

- Recognise and name 2-D and 3-D shapes

Draw shape pictures and label, spot shapes around the house.

- Count in 2s, 5s and 10s

Count up in 2, 4, 6, 8, 10..... as they go up the stairs and maybe in 5s on the way down! 5,10,15,20,25.....

## Year 2

- Know their times tables for 2,5 and 10

Have Times Table poster on the wall. Say times tables before bed each night, chant facing each wall in turn. Try closing their eyes and chanting! When built up confidence ask them tables out of order and the division facts e.g  $4 \times 5 = 20$  therefore  $20 \div 4 = 5$ . Make some simple cards with times table questions on some and answers on the others e.g one card has  $4 \times 5 = ?$  a different card has answer 20 on. Use the cards to play times table bingo, snap and matching pair game.

- Tell the time to 5 minutes, including quarter past/to the hour.

Year 2 is a perfect time to get your first watch! Telling the time takes quite a while to grasp and children need to be asked and shown several times during the day: What's the time now? How many minutes until bed time? How long is it until 4 o'clock? The school holidays are a good time to start as you are able to ask them regularly.

- Find different combinations of coins that equal the same amount.

Use real or plastic money. Can you make me £1 using the coins in this pot? Have a coins pot and get the children to count it up at the end of each week. Empty out your purse and ask children to tell you how much you have today? Give children pocket money (can be a very small amount e.g 50p) and give it to them in small change so they can work it out.

- Choose and use standard units for measure.

Helping in the kitchen is the best for this. Cooking and making cakes and biscuits, measuring liquids, putting different items in order of how heavy they feel. Need to use: m/cm; kg/g; litres/ml.

- Compare and order numbers to 100.

Have a set of number cards to 100. Children choose 3 cards and order them. Choose another two and add them. Choose numbers from 1 to 10 and make as many 3 digit numbers as they can.

- Recognise fractions

Need to know  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$ ,  $\frac{1}{2}$ . Cut up cakes, fruit and pizzas into fractions and say how many and which fraction. Draw around a plate on a piece of paper and cut into different fractions.

## Year 3

- Know 2, 5, 10, 3, 4 and 8 multiplication tables.

Have Times Table poster on the wall. Say times tables before bed each night, chant facing each wall in turn. Try closing their eyes and chanting! When child has built up confidence ask those tables out of order and the division facts e.g  $4 \times 5 = 20$  therefore  $20 \div 4 = 5$ . Make some simple cards with times table questions on some and answers on the others e.g one card has  $4 \times 5 = ?$  And a different card has answer 20 on. Use the cards to play times table bingo, snap and matching pair game. Explain that 4 x table is double 2x table and 8 x table is double 4 x table.

- Read, write and order numbers to 1000.

Write some 2 and 3 digit numbers on pieces of card or paper. Children read them, order them, and add two together. Ask them which each digit stands for.

- Count in 4s, 8s, 50s and 100s

Practise counting in these multiples, how far can they get? What about starting with a number and working backwards. 50, 100, 150, 200.

- Add and subtract numbers mentally

Ask 5 questions for the children to solve mentally. A three digit number and ones, or three digit and tens, three digit and hundreds. e.g What is  $235 + 4$ ? What is  $235 + 20$ ? What is  $235 + 300$ ?

- Add and subtract amounts of money and give change.

Look in the 'Argos' catalogue or online shop, choose 3 items to buy and add up. Work out total and change from a £20 note. Give pocket money and choose something to save up for (only needs to be small toy/item), children could work out how many weeks to get their total amount.

- Tell and write the time to the nearest minute.

Be great if they have their own clock or watch. Make sure you have an analogue and digital clock in a place the children can see. Ask them at different times during the day what the different clocks say. Talk about 12 and 24 hour clocks.

## Year 4

- Times Tables -Know all multiplication and division facts up to  $12 \times 12$

Have Times Table poster on the wall. Say times tables before bed each night, chant facing each wall in turn. Try closing their eyes and chanting! When built up confidence ask them tables out of order and the division facts e.g  $4 \times 5 = 20$  therefore  $20 \div 4 = 5$ . Make some simple cards with times table questions on some and answers on the others e.g one card has  $4 \times 5 = ?$  A different card has answer 20 on. Use the cards to play times table bingo, snap and matching pair game.

- Describe positions on a 2-D grid as coordinates

Play battle ships! Either the plastic version or pencil and paper game.

- Read, write and convert time between analogue and digital.

Be great if they have their own clock or watch. Make sure you have an analogue and digital clock in a place the children can see. Ask them at different times during the day what the different clocks say. Talk about 12 and 24 hour clocks. The kitchen clock says 15.25, what does this mean in 12 hour clock? Easiest to teach this is to take away 12 from afternoon times.

- Order and compare numbers beyond a 1000.

Top trumps cards are great for reading large numbers! Can they order and add, subtract, round the numbers on the top trumps cards.

- Read Roman numerals to 100

Research these on line and make a poster. Could have fun write different amounts and testing the adults on what they mean.

- Add and subtract numbers up to 4 digits using columnar addition and subtraction

Write a few sums for children to solve, try to make them link to real life if possible.

- Multiply 2 digit and three digit numbers by a single digit

Ask children to show you the grid method they are using or ask for your own copy of the school calculation methods. Roll a dice to generate numbers and multiply by whatever times table they are working on. E.g  $345 \times 6$ .

## **Year 5**

- Use times tables knowledge to solve related problems

Draw a quick grid and plot different numbers (including decimals) vertically and horizontally along the top and side. Children have a timer to see how quick they can fill in.

x	4	5	3	9	0.7
6					
0.4					
8					
0.06					
7					

- Multiply up to 4 digits by single and two digit, divide up to 4 digits by single digit.

Ask children to show you the grid methods and division methods they are using or ask for your own copy of the school calculation methods. Roll a dice to generate numbers and multiply. E.g 345 x 26.

- Solve problems involving addition, subtraction, multiplication and division and a combination of these.

Solve problems related to real life. How many tins of beans can I buy with a £20 note and how much change. Look at offers in the supermarket work out the best deal e.g comparing 3 for 2 with 25% off.

- Measure and draw angles in degrees.

Buy a protractor (angle measurer) and children could draw and measure the angles of items in the house. Or find examples of triangles and measure internal angles.

- Convert between different units of measure

Kilometre to metre, gram to kilogram, centimetre to metre etc.. Measure items around the house and write in different units. Practical exercises e.g cooking, craft kits are great for this.

- Read and write numbers to and beyond 1,000,000

Call out numbers children practise writing. Write numbers children state value of each digit.

- Add and subtract numbers to 4 digits

Children use column method of add and subtract (see school policy).

## Year 6

- Read and write numbers to and beyond 10,000,000

Call out numbers children practise writing. Write numbers children state value of each digit.

- Perform mental calculations, including mixed operations.

Ask children 10 quick fire questions to answer allow about 10/15 seconds to calculate. E.g How many 40s are there in 320? What is 50% of £350?

- Multiply up to 4 digits by single and two digit, divide up to 4 digits by two digits.

Ask children to show you the grid methods and division methods they are using or ask for your own copy of the school calculation methods. Roll a dice to generate numbers and multiply. E.g  $345 \times 26$ . Children will be shown long multiplication methods when ready in year 6. Remainders are given as a fraction and extended to decimal remainders. A short division method is used for dividing by single digit.

- Use times tables knowledge to solve related problems

As in Year 5 it is important to keep up practising. Draw a quick grid and plot different numbers (including decimals) vertically and horizontally along the top and side. Children have a timer to see how quick they can fill in.

- Test technique

Children can practise SATs style questions (often used for homework). These can be found online and are available as books of sample questions for home use.



### **Useful websites:**

All children from year 1 to year 6 have a Mathletics login (ask your child's teacher if you are unsure of the password) and have access to a wide range of learning opportunities. This can be accessed at:

**[www.mathletics.com](http://www.mathletics.com)**

-Sheppard software –Free games for all year groups

-[www.Mathsifun.co.uk](http://www.Mathsifun.co.uk) –explains areas clearly and what terms mean

-[www.ictgames.com](http://www.ictgames.com)-Has free maths games.

