



What can I do to help my child at home with Maths?

This aim of this guide is to help give you ideas with how you can help support your child with learning Maths at home.

In Reception and Year 1 help your child by:

Playing simple counting games and carrying out a range of activities to develop their understanding relating to the order and size of numbers.

I recommend carrying out some of the following ideas.

- Playing board games such as snakes and ladders
- Counting a range of interesting objects (coins, pasta shapes, buttons etc.). Encourage them to touch and move each object as they count.
- Counting the total number of spots on two dominoes.
- Counting each step you take/ each step as you walk up the stairs to go to bed
- Counting the number of red cars that you see.
- Throwing 2 dice. Ask your child to find the total of the numbers
- Using a set of playing cards- turn over two cards and ask your child to add the numbers. If they answer correctly, they keep the cards. How many cards can they collect in 2 minutes?
- Playing Bingo. Each player chooses five answers e.g. numbers to 10. Ask a question e.g. $7 + 1$ and if a player has the answer, they can cross it off. The winner is the first player to cross off all their answers.



Playing simple ordering games such as:

- Ordering objects such as buttons (between 10 and 20) by size from smallest to largest.
- Ordering a shuffled up pack of playing cards.

Other ideas to help:

- Lay the table for a meal with your child – selecting the correct number of items and matching them.
- Practise chanting the number names. Encourage your child to join in with you. When they are confident, try starting from different numbers - 4, 5, 6.
- Sing some of the number rhymes in the Windmill Nursery Rhyme and song booklet.
- Look for numbers in the environment e.g. house numbers.
- Encourage your child to explore addition through real life situations and role play, e.g. If I have 3 apples and I buy 2 more, how many will I have altogether?



- Hold up a different amount of fingers on each hand. Ask your child how many fingers you are holding up.
- Ping pong: Use this as a way to help develop number bonds e.g. to 10. You say 6- your child must return as quickly as possible with the answer of 4.

In Year 1 and 2 help your child by:

- In year 2 – chant and learn by rote their 2, 5, 10 times tables
- Count objects that are in group of 2, 5 and 10
- Count different amounts of 2, 5 and 10p coins
- Playing with wooden blocks, building towers and other structures. Is it possible to build two towers of the same height, whatever number of blocks you start with?
- From a pack of cards (without the tens, the Jacks, the Queens and the Kings) play a game of pairs where you try to turn over two cards that add up to 20
- With a pack of dominoes play the game of 'pairs' where you turn over 2 dominoes so the total number of spots is 12
- Talk about shapes that can be found in the house
- Play a game of estimating then measuring the lengths of objects in the house
- Play a game of ordering everyday objects according to their weight, and then weigh them
- When someone opens a door, talk about the angle the door has turned through
- Draw your child's attention to the clock so that they learn to match times with events
- Focus on helping them tell the time to the nearest 5 minutes on an analogue clock
- Play a game of 'find the number' somewhere in the house or on the way to school. Then ask questions around this e.g. what two numbers can I add together to make this number?
- Ask the children to add different piles of sweets/ pasta/ rice.
- Play games to rehearse number bonds to 10/100 e.g. 'Ping pong.' You say 96. Your child must say the number that will make 100.
- Count with your child in tens from any starting point e.g. 24, 34, 44, 54
- Give your child access to extended number lines e.g. measuring tapes, rules- to help with their calculations.
- Find different ways to partition (split up) numbers e.g. $34 = 30 + 4$, $23 = 20 + 3$
- Throw 3 dice/ an increasing amount of dice. Ask your child to find the total of the numbers
- Use a set of playing cards. Turn over three/ four cards and ask your child to add the numbers.
- Go shopping with your child to buy two or three items. Ask them to work out the total amount spent.





In years 2 and 3 help your child by

- In year 2 – chant and learn by rote their 2, 5, 10 times tables up to 12
- In year 3 – chant and learn by rote their 3, 6, 4, 8 times tables
- From a pack of cards (without the tens, the Jacks, the Queens and the Kings) play a game where each player is dealt four cards and everyone has 1 minute to make up as many different calculations as possible using cards that they have in their hand. A scoring system can be created such as 1 point for using two cards, 2 points for using three cards and 3 points for using all four cards
- Dice bingo:– throw 2 dice and multiply the numbers together – cross off the numbers on a 'Bingo' card, such as:

10 5 9 6 15 20 8 12 4

- Talk about numbers that you see on packets or tins of food. This could include talking about how healthy different foods are
- Identify symmetrical objects, for example, look for symmetrical wheel trims on cars
- Find out how many millilitres different containers hold, such as a cup, perhaps estimating answers first then using a measuring jug to check the estimates
- Use a real clock to talk about the times certain events happen at home, for example, getting up in the morning, meal times, when the post arrives. Also, you could talk about times when certain television or radio programmes begin and end, and how long they last for.
- Help when cooking by measuring ingredients and using the timer to develop their understanding of how long 5 minutes is, how much 200ml is e.t.c.

In Years 3 and 4 help your child by:

- In year 3 – chant and learn by rote their 3, 6, 4, 8 times tables
- In year 4 – chant and learn by rote their 11, 12 times tables – by the end of year 4 they should know with immediate recall all multiplication and division facts up to 12×12
- Discuss how you might work out the cost of a week's food for the family. Encourage your child to estimate the shopping bill by keeping a running total while you shop
- Try to find examples of numbers that contain fractions ($\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$) or decimals in a daily newspaper, a magazine or on food containers
- Make a list of calculations where the answer is the same. What is the hardest calculation that can be made?
- Work out how much time, on average, different people spend doing different things at home, for example, eating, tidying up, cooking, playing, watching television, using a computer, sleeping
- Measure ingredients when cooking
- Take opportunities to discuss weights written on packets of food and what they mean in terms of grams and kilograms
- Look at maps of different scales of your local area, for example, a road atlas and a web map, and discuss how far it is from your home city, town or village to other nearby places.
- In year 4, children get introduced to roman numerals – can you spot any out and about?

Roman Numerals' Basics:

I = 1 ; V = 5 ; X = 10 ; L = 50 ; C = 100

Letters can be combined to make larger numbers. If a smaller value appears in front of a larger one then it is subtracted, e.g. IV (5 - 1) means 4. If the larger value appears first then they are added, e.g. VI (5 + 1) means 6.



In Year 5 and 6:

- By the end of Year 4 the children should know with immediate recall multiplication and division facts up to 12×12 . Ask your child questions such as 7×8 , 9 divided by 6- to ensure they remember them.
- Look at football league tables. Discuss things such as goal difference
- Chant out factors of numbers.
- Look at the weather page in a local newspaper or website and find out what all the different sets of numbers/pieces of information mean. Use this to discuss negative numbers
- Look for and discuss the use of percentages when shopping and in adverts. Discuss the per cent (%) interest on a savings account/ price with/ without VAT added.
- talk about supermarket offers, for example, "3 for the price of 2", "Buy 1 get 1 free", "Two for £2", "Buy one get one half price". Work out together which is the cheapest or best value
- Calculate percentage sales discounts e.g if the TV was reduced by 20% or vice versa- what was the original price before the discount?
- Adapt recipe amounts for different numbers of people
- Play the 'estimate the size of the shopping bill' game, that is, round every item to the nearest 50p and see how the estimated bill compares to the actual cost
- Read bus/ timetables and maps when planning a journey. Work out how long a journey may take/ how late the bus is.
- Look at local ordnance survey maps and talk about how bearings are measured from your city, town or village to other nearby places.
- watch documentaries and discuss the maths involved in climate change or other environmental concerns
- Watch the Royal Institution (RI) Christmas Mathematics Lectures, designed for children and young people that offer exciting ways of looking at maths problems.

To really challenge your child:

- Consider the maths involved in modelling real-life situations, such as building a bridge or the arc a ball makes when thrown
- Find out why gambling is likely to cost you money and is inadvisable
- Explore the interest earned on a range of savings accounts, the cost of obtaining money for a mortgage or the cost involved in using credit, for example, children can be encouraged to use an ICT spreadsheet to calculate and compare interest rates

If you would like any further ways to support your child with learning Mathematics at home, then please feel free to come in and speak to Jon Davies.

