

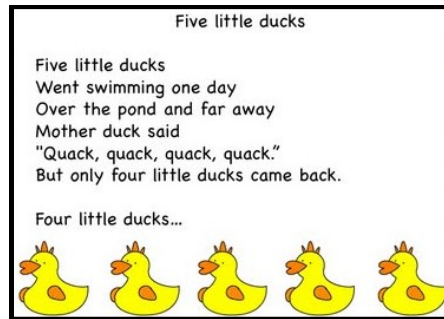
At Home with Maths Parent Information Booklet

Mathematics is a very important part of your child's schooling. Being able to enjoy maths and succeed in the subject can make a lot of difference to your child's confidence at school.

One of the best ways you can help your child to succeed in maths is to make sure that they feel really at home with numbers in everyday situations

Younger Children

- Find stories, puzzles and rhymes that involve counting and written numbers.



- Let your child hear you count aloud as you cook, garden or shop.
- At home let your child help to: set the table, sort cutlery, crockery etc. to develop an awareness of 1:1 correspondence. Sort clothes for washing - size, colour. Match pairs of socks, gloves, shoes - counting in 2s. Arrange pairs of shoes in order of size - which pair is the biggest, smallest? etc. Who might wear this pair of shoes?
- Encourage your child to notice printed numbers in your neighbourhood. Count numbers on the gates and doors. Comment on bus numbers. Show them the numbers on your bus ticket or on your receipt and explain what they mean.



Parking



- How many cars are parked altogether in this car park?
- Look at the parking restrictions. How long can we stay? When can we park?
- Look at the parking fees. How much to stay one hour? Two hours?
- How long can you stay in the car park if you only have £3.00 change?
- What coins can you use to pay for the parking?

On the bus, train, tram or ferry

- Look at the timetable and work out when your transport is due.
- Look at the fares. What is the cheapest way to travel to your destination?
- Look at the route on a map to see where the bus etc. comes from and goes to.
- Look at where you could change to another type of transport.
- Look at the display board and talk about the information that it gives.
- Look at your ticket, what do the numbers on it mean?

- Can you see the distances shown on the map?
- What does the square grid mean? Can you find the key that tells you?
- Are all the maps in your road atlas the same? Are some on a different scale?



Stopped on red

- How many cars go past in the other direction before the lights change?
- What is the most common colour for a car?
- On average how many people in each car?
- What position are we at the lights? First? Third? Tenth?
- How long do the lights stay red?

Road Signs

- Look at the speed limits and compare them with your speed.
- Are the lights mostly red or mostly green as you drive your route?
- Look for road signs that tell you how far to go until the next junction or exit or turn off.
- Look for road signs that tell you about gradients or slope.
- Look for signs on buildings that tell you the date, the temperature or any other information.
- What are the speed limits in town? On the motorway? Near a school? In the car park?
- Look at the prices for fuel as you pass by the filling stations. Which is the cheapest?
- Look at any ferry, bridge or toll way. How much for a car? How much for a motor cycle?



- Count with your child: *How many bears in the pram? How many steps to the gate? How many socks on the line?*



- Use words such as *Which is the biggest? Are there enough? How many left?* In order to draw your child into thinking mathematically.
- Use time language in conversations: *What shall we do today? Yesterday we went to the park. Tomorrow will be Thursday.*



- An important concept in maths is that of 'composition' (understanding that one number can be composed of two or more numbers). Show your child this concept in everyday life: *We've got 6 cakes, 2 chocolate, 2 strawberry and 2 vanilla. Tomorrow there will be 2 boys and 2 girls, that's 4 children altogether. We used to have 6 picnic chairs but 2 are broken so now we only have 4.*

Older Children

- When you watch sport, talk to your child about scores, records and league tables. Sport provides excellent opportunities for mathematical talking and thinking. Share the sports section in the newspaper for the final scores, record times etc.

- Encourage your child to get used to handling money as soon as possible, so that they begin to get real life experience of adding, subtracting, multiplying and dividing with money.



- Teach your child to be a serious shopper and to look at prices, weights, measures etc. to find the best buy.

- Open a bank account for your child and show them how to read their statement and check their deposits and withdrawals.



- Encourage older children to use a computer spreadsheet to compile a summary of sport scores or an inventory of their hobby collection.
- Encourage your child to count in 2s, 5s and 10s when counting large numbers.

Look inside the car

- Look at the displays on the dash. What do all the different numbers mean?
- Watch how the display changes as you travel, see how the numbers change 3794.7, 3794.8, 3794.9, 3795.0, 3795.1.
- How far has this car travelled altogether? How far has this car travelled each year?
- How much fuel do we have? Is the gauge full, half full, quarter empty?
- What does the manual say about how much fuel we can put in the car? How much would this cost us?
- About how far could we travel on a full tank?



Distances & Maps

- Look at the distances on road signs.
- Set the distance trip to 0 and see how far you travel on a journey.
- Time how long your journey took.
- Estimate how far you travel in a week, a month, or a year.
- Look at the map, where are we now?
- Use the index to look up your street. Use the page and grid reference to find it on the map.
- Find your school by page and grid reference. Can you see the route you usually take? Is there another route?
- Use the Sat Nav to find out how many miles to go. How long should this take?

SEASIDE HIGHWAY	
Sandy Beach	5
Bill's Lagoon	9
Sandstone Cliffs	22
Golden Blue Beach	45

Maths on the Move

Did you know that you can turn the car, bus, train or ferry into a great maths classroom for your children?



Maths is not just about 'doing sums'.
Maths is about thinking mathematically, seeing numbers around you, and understanding what those numbers mean.

Look out of the car window at car number plates.

- Is the car ahead a higher or lower number than you?
- What is the highest number car you see today?
- What is the lowest number car you see today?
- What is the smallest and biggest number you could possibly have?
- Add all the digits in the car number plates you see - which has the biggest number?
- What patterns can you see in the numbers on the cars around you?

Patterns might include: 246 (sequence of even numbers),
579 (sequence of odd numbers), 257 ($2 + 5 = 7$), 826 ($8 - 2 = 6$)

- What numbers can you see on the large vehicles around you? What do the numbers mean? (You might see the company's telephone number, the weight limitations, the engine size, the number of passengers it can carry, its model number etc.)

- Encourage your child to use numbers that are already provided on packets, containers etc: *How many paper clips in that pack? So will one pack be enough? How much elastic on that card?*



- Involve your child in practical activities such as cooking, household projects, repairs and gardening so that weighing, measuring, calculating, counting, budgeting and timing all become part of everyday life.

- Encourage craft and construction activities, both really help to promote good mathematical thinking.



- Try to use decimals, fractions and percentages when you can: *We've only got about one third of those labels left. You save up 75% and I'll give you the other 25% of the price of the bike. It's about 1.6 metres long.*

- Show your child how to use estimation and rounding to work out the maths that you need when you buy materials for a project at home or in the garden, or work out your budget or check your supermarket bill. Include your child when you do this type of maths: *Let's say it will be about £3.00 each to get in, and maybe another £1.50 each for lunch for the 4 of us, so say £4.50. Better make that £5.00 to be on the safe side. Four of us at £5.00 each, so £20.00 should be fine.*



- Extend your child's knowledge of numbers by showing them bigger numbers and talking about them. Look at expensive items such as skateboards, computers, bikes, cars etc. to increase your child's familiarity with large numbers.

- Promote your child's mental arithmetic and memory for number facts by playing family games where scores have to be kept and added up.

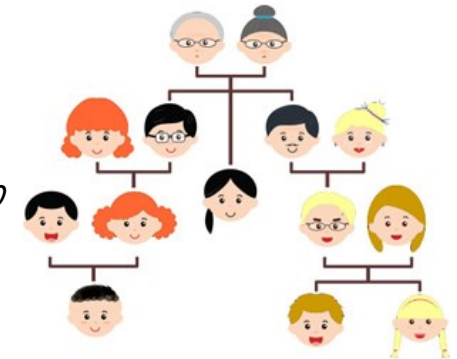


- Talk to your child's teacher about the methods that are used in school and the terminology being used, so that if you help your child with school maths you are working along the same lines as the teacher and not confusing your child.



- Encourage your child to make intelligent use of a calculator. Show them how to check their answer against an estimate of the right answer.

- Use your family tree and family history to give your child a sense of time: *Gran was 60 when you were born and Great Uncle Charlie is 10 years older than Gran.*



- Use a calendar or yearly planner for your family organisation. Put it somewhere where everyone can see it and use it to mark in important dates.