

## Helpful websites

<http://www.oxfordowl.co.uk/home/maths-owl/maths>

[http://www.bbc.co.uk/schools/parents/primary\\_support/](http://www.bbc.co.uk/schools/parents/primary_support/)

[http://www.mad4maths.com/math\\_help/](http://www.mad4maths.com/math_help/)

<http://www.ictgames.com/resources.html>

[http://www.familylearning.org.uk/money\\_games.html](http://www.familylearning.org.uk/money_games.html)

<http://www.bbc.co.uk/education/subjects/z826n39>

Your child can learn about computer programming, developing understanding of movement, angles of turn etc whilst creating their own animations using [Scratch](#) which is free to download.

If you would like help in improving your own maths skills, the following website is a great place to start (many ideas found in this leaflet came from this fantastic site):

<http://www.nationalnumeracy.org.uk/improve-your-maths>

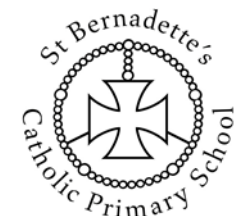
If you have other great ideas for supporting children with maths at home that you would be willing to share with our school communities, please contribute to our blog which can be accessed via either school website.

# Maths at Home

## A Parent's Guide Key Stage 2



Complied with the support of staff, governors and families



# Stay Positive!

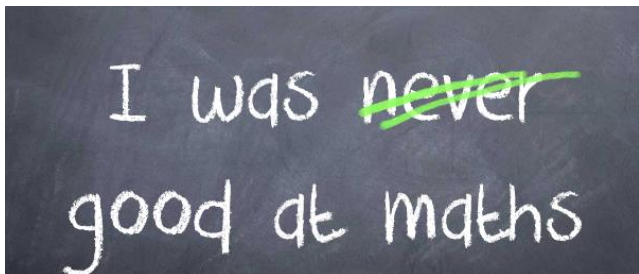
Basic maths skills are essential for everyday living - shopping, cooking, paying bills, budgeting for your family needs etc.

In order to succeed in our competitive society, it is crucial that our pupils develop a good grounding in maths and develop sound numeracy skills during their primary school years. Parents and carers are vital partners with school staff in helping their children develop these all important skills.

Studies show that Maths makes many adults feel anxious. You can help your child enormously by presenting a positive and enthusiastic attitude when talking about maths.

However you feel about maths, you can still make a huge difference to your child's confidence and learning.

1. Be positive. Don't say things like 'I can't do maths'...your child might start to think like that themselves...
2. Praise effort - this shows that by working hard they can always improve.
3. Talk about and do everyday maths together.



# Books and TV

Books, TV and radio are a great way to keep children excited about numbers. Ask them about the maths in any story they read, or TV programme they watch.

How did the 'clock' work in the Hunger Games: Catching Fire by Suzanne Collins? How long does it take Alex Rider to solve his missions in the series by Anthony Horowitz? How long ago did the events in Street Child take place?

How many votes are being cast on Strictly Come Dancing? If the winner got 60% of the votes, how many votes did they get? In how many minutes does this programme finish? Have you got time to watch the full match before bedtime? Including half time and extra time, how long did this football match take from start to finish?

Compare the statistics following football matches - who had most corner kicks? Greatest ball possession? etc

## Key Language to Use

Estimate, predict, directions, distance, convert, fraction, percentage discount, reduction, change, increase, decrease, greater, less, interest, overdrawn, debt, value for money, capacity, mass, length, distance, compare, time zone, practise rote learning tables to 12x12, squared number, prime number

## Out and About

- Before you go somewhere (familiar) ask your child to give you directions (including timings if possible), then test their directions out. If they get something wrong, ask them to think of the best way to get back to where you want to go (which might not necessarily mean going backwards).
- Before going somewhere unfamiliar, [download a map](#) and ask your child to give directions or for long journeys, download directions from [AA Route Planner](#) and ask your child to read out the directions for you.
- If travelling by bus or train, ask your child to help to plan the journey, reading the timetables and planning timings for connecting trains/buses. Talk to them about the London Underground and show them how to follow the [Tube map](#).
- Look for patterns and symmetry in your local area.
- Play sport! Sports are the perfect chance to talk about speed, scores, time and angles. Get competitive - try out different angles to try and score from. How many star jumps can they do in a minute? Use an [online stopwatch](#) to compare their heart rate before and after exercise. How long does it take for the heart rate to return to normal?
- Explore the local area and ask them to guess - how many people live in the town? How far is the nearest airport? Ask for the reasons behind their answers, and check real answers online too.
- Whatever their hobby - dancing, football, netball, arts and crafts etc. ask them to explain the maths they have come across.
- On journeys ask questions like - how many miles/kilometres have we travelled? How many are left? If we travel at an average of 50mph what time will we get there?

At the age of 10+, children are learning to:

## Indoors

- **Talk about numbers in sport** - how many points does your team need to avoid relegation? How many goals /tries/ conversions/points/runs has your team scored this season?
- **Measure ingredients/set the timer** together when you are cooking. Talk about fractions in cooking - how many quarter cups make a cup?
- **Talk about proportion** when you make a cup of tea- how much milk? How much water? If you were making 6 cups? If the recipe is for 6 people, how much of each ingredient will we need for 9 people?
- **Talk about time** - for example, what time should they leave the house to be at school on time? Look at [different time zones](#) around the world. What time is it in Shanghai and Rio de Janeiro right now?
- **Look for maths on TV, newspapers, magazines etc**, and talk about what it means - look at graphs in newspapers and explain what they represent.
- **Use newspapers** and talk to your child about percentages in special offers, the probability in the weather reports, the length of TV shows in the TV guide, and compare the salaries in the jobs section.
- **Solve maths problems at home**, e.g. 'We have 3 pizzas cut into quarters, if we eat 10 quarters, how many will be left?'
- **Talk about shape, size and quantity** - use the internet to find interesting size facts like most and least populated cities, highest mountains or deepest valleys etc
- **Discuss the weather** - How does the temperature differ in different parts of the UK? What is the difference between the temperature in Milton Keynes and other cities in the world? Talk about °F and °C. Can they convert between the two? ( $^{\circ}F = ^{\circ}C \times 1.8 + 32$ ) Eg How many °F is 20 °C?  
 $20 \times 1.8 + 32 = 68^{\circ}F$

# Maths and Money

As your child understands more about money, you can use it to develop their maths. This helps their personal finance skills too.

- **If your child has a mobile phone**, use it to talk about maths and money saving. Look together for the best phone contracts/pay as you go plans. Does their network sell any extras that would make texts or calls cheaper? Is it cheaper to text or use BB messenger or WhatsApp?
- **At the shops** - if you are buying a couple of items in a shop, ask them to work out how much they will cost. As a challenge for older children, ask them to try and estimate what the weekly shop will come to. Look at the shelf labels in the supermarket - how much per 100g or per kg does the product cost? Is the supermarket's own brand cheaper than a well known brand? By how much per 100g?
- **If you give your child pocket money**, use this as an opportunity to talk about maths - are they saving for anything? How much do they need to save each week to buy it in a/two/six month(s)?
- **Work out offers** in supermarkets together - are they worth it?
- **When you travel** somewhere, ask them to help you work out whether it's cheaper to drive or take public transport. Are there any deals you can get on public transport? Ask them to help convert £ to the local currency.
- **Talk to them about getting a bank account** and look together for the best joining deal.
- **Ask your child to check change** for you.



# Games – *Maths is fun!*

Games help children develop a positive attitude towards maths. Whenever they are playing something that involves maths, tell them it's maths! This helps children realise just how much we use maths every day.

- **Play games with cards** - players take 2 cards and add the numbers - the player with the highest number wins. You can play this game with subtraction, multiplication, and division too.
- **Get them to design a tree house**, clothes or car (or whatever they fancy!), ask them to add measurements too.
- **Board games** are great for developing skills. Try games like Connect 4, Rummi Kub, Battleships, Jenga, Monopoly, Scrabble, Dominos, etc
- **Ask your child to design** their own board game (and dice), and play the game together. Afterwards, talk about what mathematical thinking, reasoning, or problem solving the game used.
- **Play the number plate game** - Take turns to add the numbers on vehicle numberplates. Who is the winner after 5 cars each?
- **Play the pub name game** - On car journeys, take turns to count the number of legs represented by pub names (eg Pack Horse = 4 legs, The King George = 2 legs, The fox and hounds = a clear winner!)
- **Guess the number** - Think of a number. Can they guess it by asking only yes/no questions. Eg Is it odd? Is it in the 9 x tables? Is it a prime number?