## Top Tips to help your child with Maths

At St George's Catholic School we believe that enjoying Maths leads to children's success in Maths. We understand parents sometimes feel more confident helping with Reading or Spellings so here are some quick and easy ideas if you would like to help your child with Maths.

Top tip Just 5 minutes with Mum or Dad, (Grandparents and other adult carers included) can be more valuable to your child than leaving them to play the game alone or with siblings. We invite you to take the Maths Challenge! Can you find 2 or 3 times in your busy week to play these Maths games? They could make all the difference.

5 minute games that can make your child a more confident and successful Mathematician

## 1. Counting games

Top tip Always link counting with an action. Throwing and catching a beanbag or small teddy to each other, while counting, is ideal. The rhythm of the action gives the counting pace and fluency and builds confidence. Other ideas include:-
kicking a football to each other, while counting
rolling marbles to each other (good rainy day alternative)
blowing bubbles and popping them as you count
skipping/walking/marching and counting (good for times tables)
throwing and catching a ball or frizbee
dropping pennies into a money box/dish (older children counting in 5 p's, 2 p 's, or 10p's)
For younger children start with counting forward in ones to $10,20,50,100$ etc. Play What comes next? "11, 12, what comes next?" Take it in turns to ask.

For older children start with counting forward in tens, two's and fives, extending to include all the times tables to 12.
Play What comes next? "5, 10, 15, 20, what comes next?"
Or "77, 88, 99, what comes next?" Take it in turns to ask.
Top tip Start counting from different numbers, not always zero or one. Can you count on from 12? Can you count in 7's from 35? (Have a times tables chart handy!)

## 2. Counting backwards

Top tip Always link counting with an action. See above
It sounds obvious but many of us forget to teach our children this vital skill at home. Start with "10, $9,8, \ldots .0$ ". Then count back from 15, 20, 50 and 100, extending to random numbers in between e.g. 27, 49 etc.
Play What comes next? "88, 87, 86, what comes next?" Take it in turns to ask.
Older children need to practise counting backwards in tens, two's and fives, extending to include all the times tables to 12.
Play What comes next? "80, 70, 60, what comes next?"
Or "84, 77, 70, 63, what comes next?"
Top tip Remember to let your child set questions for you too; this greatly extends learning and confidence.

## 3. Dice games

Top tip Start with one die, to practise counting, then move on to two dice. Playing with two dice is brilliant for practising rapid recall of number bonds, adding numbers again and again without realising they are doing any Maths. If it is fun, children will be keen to play.

In year 2 some children make 'Slides and Ladders' games to bring home and play with you. Perhaps you have one in the back of a cupboard? If so, you may like to play the more advanced versions of the game, now your child is older. Otherwise, use Snakes and Ladders, Ludo or any other dice game where you can use 2 dice.

## Basic principles of 'Slides and Ladders'

The game can be played by 2 or more people. You can use 1 or 2 dice and vary the rules as you wish. Playing with 2 dice improves children's ability to add numbers together quickly. Speaking about the numbers you land on helps children to know how to say numbers correctly e.g. many children mix up ' 17 ' and ' 70 ' and other 'teen' and 'ty' numbers. Discussing where you may land improves children's awareness of number patterns, e.g. if you throw 10, you are actually moving down to the square directly below. You could talk about why this is so. I expect you will find many other number patterns to chat about, which is great for your child's mathematical understanding and use of mathematical vocabulary.

## Variations (more advanced)

- Use 3 dice and add together
- Use 2 dice but subtract or multiply the numbers.
- Choose whether to use,,$+- x$ or divide, depending on the numbers you throw!

Other dice and money themed games, such as Monopoly are also great for Maths skills, but will take longer than 5 minutes - you can always set a time limit for a game, e.g. 30 minutes to make it fit in with busy family life.

## 4. Addition Dominoes

(1) Explain that we are playing dominoes a special way today. (Some children will have played a version at home, others associate it with knocking down rows of dominoes). "Today we are going to think about adding numbers".
(1) Spread out the dominoes face down on the table. Each player takes 7 pieces and places them in front of them, face up. Ask if anyone has a double. Double 6 starts, if nobody has this, double 5, then double 4 etc.
(1) Once the first tile is placed centrally, model the language, e.g. "Double 5 is 10 and half of 10 is 5 ." Point to both sides, then cover one side as you say this.
(1) Moving clockwise, the next player must find a matching piece e.g. 5 and 4. Model the language, " 5 add 4 equals?"
Top tip If no-one knows, model counting on i.e. putting your finger on the 5 , saying " 5 ..." then pointing to each dot on the other side, saying " $6,7,8,9$,"
(10) Encourage children to say the right pattern of language and to touch the tiles, pointing to dots etc.
(1) If you are more confident in another language, Maths games can be played in home languages too. Children who understand concepts in one language can transfer them later.
5. Mathletics - We have now bought this for all our children to use at home and school.

If you have 5 or 10 minutes, you can set up your child on the Mathletics website, checking that they have chosen a suitable activity. Sometimes their teacher will have set one or two activities, otherwise they can choose games they enjoy. All the games on Mathletics help strengthen Maths skills that are vital for work in school. They are also great fun. You may find you enjoy watching your child play and are impressed by their knowledge.

## 6. Everyday tasks

Top tip As well as making special time for playing Maths games at home many families use everyday tasks to teach their children Maths skills. You have probably done this yourself already, but here are a few ideas or reminders:-
(10) Pairing socks and putting them away gives younger children a great opportunity for counting in two's.
(10) Cooking and baking are opportunities to talk about weighing and measuring ingredients. Estimating quantities is excellent training for all ages.
(1) Older children enjoy estimating the length of short journeys, check the mileometer, everyone in the car makes an estimate, winner gets to set the next challenge.

## 7. "Fizz Buzz!"

This is a fantastic game for all ages! There are many different versions but this is how I usually start.

## Top tip First play "Fizz!"

A game for 2 or more players, count round in a circle, each person says a number. When you reach a multiple of 5, the person must say "Fizz!" instead.

Eg. "1," "2," "3," "4," "Fizz!" "6," "7," "8," "9," "Fizz!" "11, "12," etc.
When someone makes a mistake they are out. The last person left in is the winner.

## Top tip Next play Buzz

A game for 2 or more players, count round in a circle, each person says a number. When you reach a multiple of 3 , the person must say "Buzz!" instead.

Eg. "1," "2," "Buzz!" "4," "5," "Buzz!" "7," "8," "Buzz!" "10 "11, "Buzz!" etc.
When someone makes a mistake they are out. The last person left in is the winner.
Now play "Fizz Buzz!" ie. Combine the two.
"1," "2," "Buzz!" "4," "Fizz!" "Buzz!" "7," "8," "Buzz!" "Fizz!" "11, "Buzz!" "13," "14"
"Fizz Buzz!" (because 15 is a multiple of 5 and 3, ) "16," "17," etc.
Older children play using the times tables they are working on. eg. Fizz =6, Buzz = 7
Challenge: Play "Fizz Buzz!" backwards, counting down from a chosen number!

There are many more games that use simple maths skills. What about Bingo, Beetle or card games? I hope this may spark a renewed interest in playing them with your children. I know they will reap the rewards. Even now, I distinctly remember the moment I learnt that $8+7=15$. Was it at school? No, I was playing a game of cribbage with my Grandma!

Hope you enjoy trying out some of these games with your family.

Rachel Harding

Rachel Harding (Maths Subject Leader)
N. B. We are planning another short information evening for parents after school in the autumn term 2016, details to follow. We will demonstrate these and other games, with help from some of the children.

If you are interested in how Maths is taught in schools, you may also like to visit the following website:
www.ncetm.org.uk
The National Centre for Excellence in the Teaching of Mathematics

