



**Bankton Primary School
Parents as Learning Partners**

**How to Help Your Child with Maths
and Numeracy**

Everyone CAN Be Good At Maths!



Young children, before they come to school are often excited by numbers and the 'wonder' of Maths.

They recognise patterns in nature, reorganise a set of objects and often discover they have the same number.

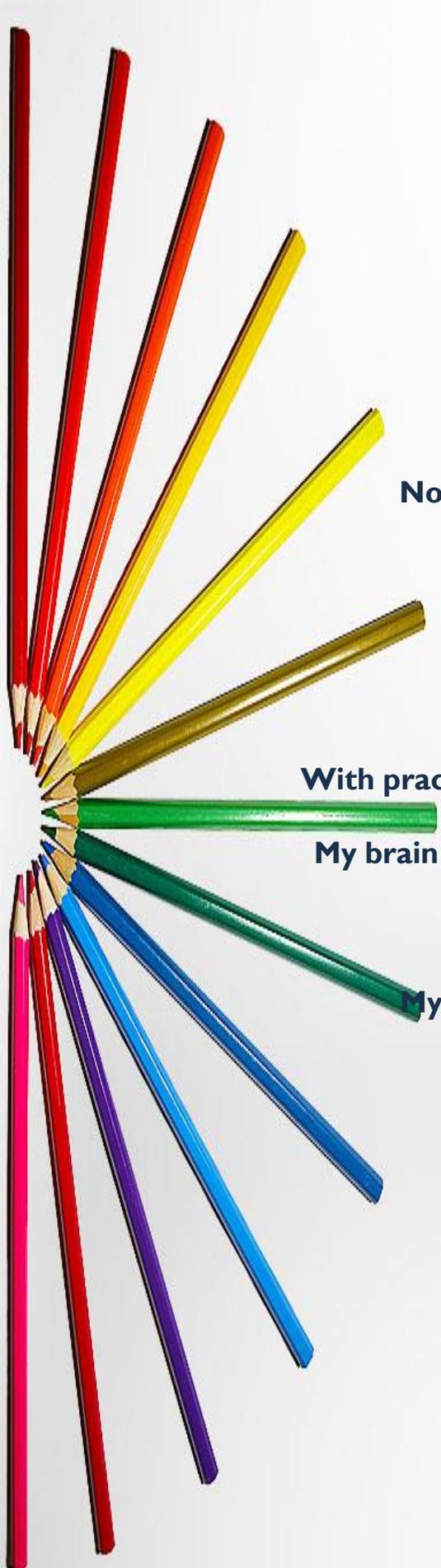
Maths and Numeracy is a big part of early play and children develop the language of 'more than' 'less than' 'before, after, between'. They talk naturally about number and with the help of adults in play situations begin to develop 'number sense'.

However, some children quickly decide after starting school that they are 'not good at maths' or that they are 'not a maths person' and their 'fixed mind set' creates barriers to their progress.

A growth mind set in maths helps children to realise that mistakes are learning opportunities and that with effort and practice they CAN improve and develop their maths skills.

We would like you please, as parents, to reinforce that growth mind set with your child.





Fixed Mindset

**I'm not good at Maths
I always make mistakes
I don't have a Maths brain
Everyone is better at maths than I am
No one in my family has ever been good at Maths**

Growth Mindset

**With practice and effort I can develop my skills in maths
Mistakes are learning opportunities
My brain is elastic and can make maths connections the more I practise
By working with other people I can learn and use more strategies
My family can use Maths in every day life. We can improve our skills together**

What Teachers say to encourage Growth Mindset

Everyone CAN learn Maths to the highest levels. You need to believe in yourself AND work hard.

Maths is about creativity and making sense of patterns and solutions. Look for patterns in Numbers, shapes and in the world around you.

Mistakes are valuable. Mistakes grow your brain and help it to work better.

Maths is about questions and communicating – about making connections with what you already know about numbers.

Questions are valuable. You should always ask questions and answer questions. Ask yourself – why does that make sense?

Depth of learning is more important than speed. Mathematicians think slowly and deeply.

Maths class is about learning, not performing

Maths is a growth subject. It takes time to learn and it's all about effort.





6 Easy Ways to Help Your Child Improve His / Her Maths Skills

Information from Professor Jo Boaler,
Stanford University

Parents as Learning Partners in Numeracy Development

Encourage children to play with maths puzzles and games. Puzzles and games – anything with a dice really – will help kids enjoy maths, and develop 1 number sense, which is critically important.

Always be encouraging and never tell kids they are wrong when they are working on maths problems. Instead find the logic in their thinking – there is always some logic to what they say. For example if your child multiplies 3 by 4 and gets 7, say – Oh I see what you are thinking, you are using what you know about addition to add

Never associate maths with speed. It is not important to work quickly, and we now know that forcing kids to work quickly in maths is the best way to start maths anxiety for children, especially girls. Don't use flashcards or other speed drills. Instead use visual activities such as <https://bhi61nm2cr3mkgk1dtaov18-wpengine.netdna-ssl.com/wp-content/uploads/2015/03/FluencyWithoutFear-2015.pdf>



A Parent's Role is Crucial for Successful Development

Never share with your children the idea that you were bad at maths at school or you dislike it – especially if you are a mother. Researchers found that as soon as mothers shared that idea with their daughters, their daughter's achievement went down.

Encourage number sense. What separates high and low achievers is number sense – having an idea of the size of numbers and being able to separate and combine numbers flexibly. For example, when working out $29 + 56$, if you take one from the 56 and make it $30 + 55$, it is much easier to work out. The flexibility to work with numbers in this way is what is called number sense and it is very important.

Perhaps most important of all – encourage a “growth mindset” let students know that they have unlimited maths potential and that being good at maths is all about working hard. When children have a growth mindset, they do well with challenges and do better in school overall. When children have a fixed mindset and they encounter difficult work, they often conclude that they are not “a math person”. One way in which parents encourage a fixed mindset is by telling their children they are “smart” when they do something well. That seems like a nice thing to do, but it sets children up for difficulties later, as when kids fail at something they will inevitably conclude that they aren't smart after all. Instead use growth praise such as “it is great that you have learned that”, “I really like your thinking about that”. When they tell you something is hard for them, or they have made a mistake, tell them: “That's wonderful, your brain is growing!”





Useful Weblinks for Parents

<https://www.youcubed.org/parents/>

<https://www.youcubed.org/tasks/>

<https://www.youcubed.org/visual-math/>

<https://www.youcubed.org/think-it-up/believe-brain-operates-differently/>