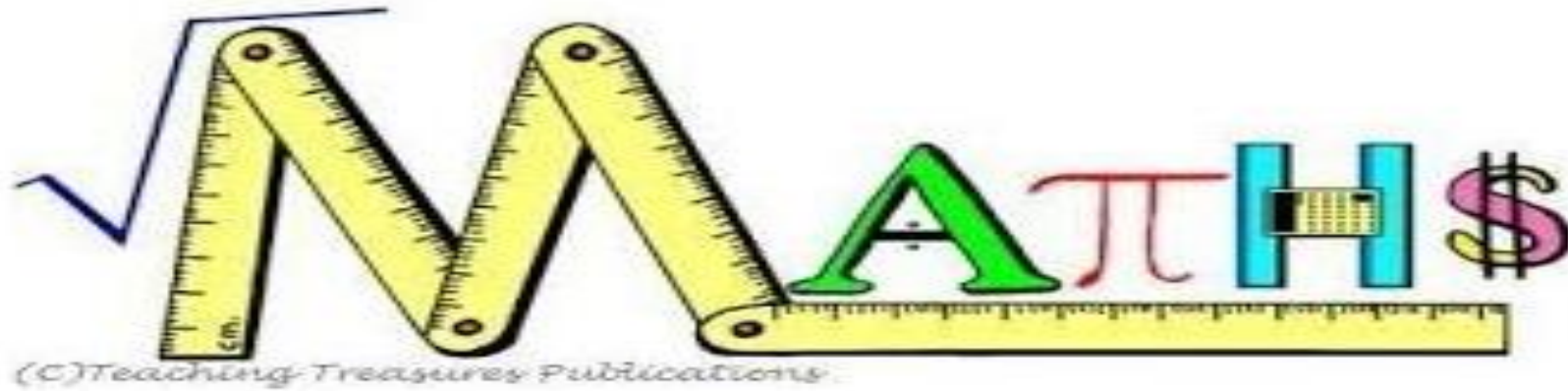
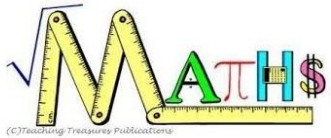


# Welcome to our KS1 Maths Workshop

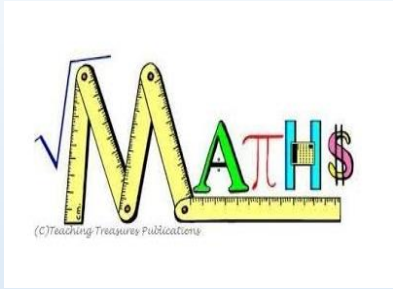




# Aims of the workshop

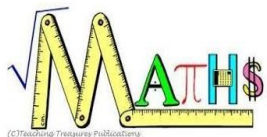
To share:

- how we teach children maths and develop their basic skills and reasoning.
- how you can support your child to develop their maths skills at home.
- any questions you may have about the maths curriculum.



Discuss with your group: what do you remember about maths as a child both at home and school?

- Did you love maths?
- Did you hate maths?
- Do you remember anything you were taught?
- How much of the maths you were taught are you still using today?
- What makes a successful mathematician?



# What makes successful mathematicians?

- Understanding - concepts, operations and relations
- Applying - devising strategies for solving problems
- Reasoning - using logic to explain and justify a solution
- Engagement - seeing maths as sensible and useful. Being willing to have a go and work it out - there is nearly always more than one way!
- Enquiring - being willing to ask and answer questions - I'm not sure about ... Can you explain why? How did you work that out? Could you do it this way?

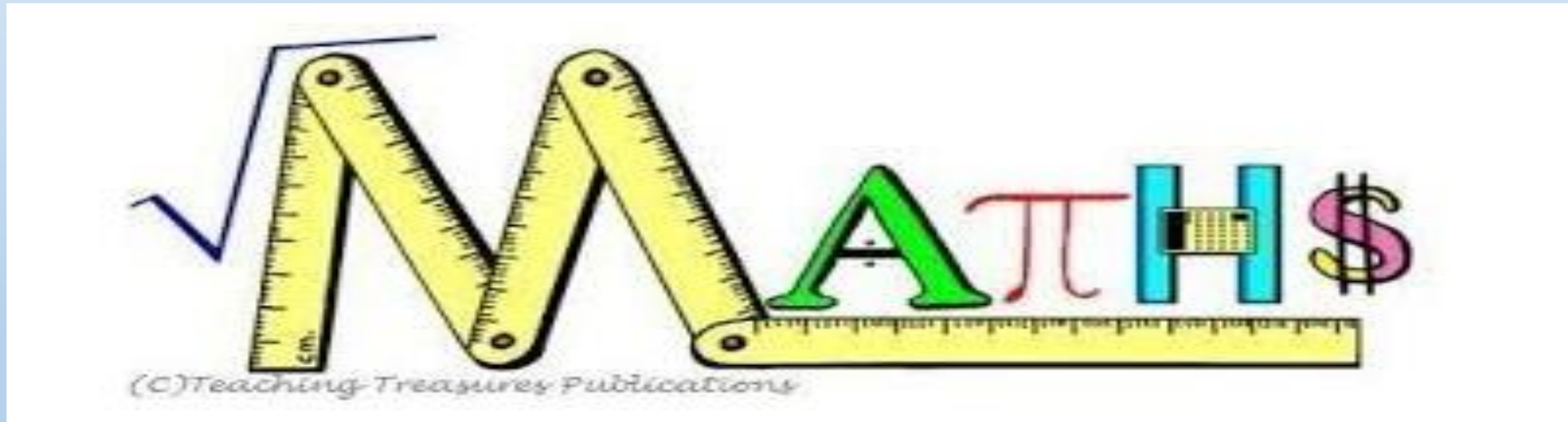


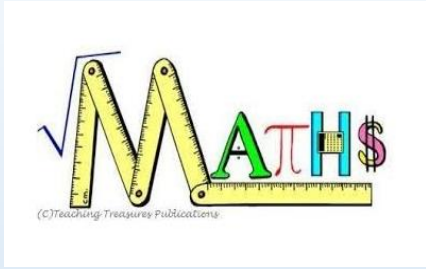
# The Maths Curriculum

The DFE says:

- The curriculum is aimed at allowing children to become fluent in the fundamentals of mathematics, giving them varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- In other words, children need to have good knowledge of basic maths skills and be able to reason logically.

What are Basic maths skills?  
Talk to your group.





# Basic skills are:

- Development of mental fluency with whole numbers, counting and place value
- Being able to read and write numbers
- Knowledge and understanding of the 4 operations (+ - × ÷) using mental strategies and practical resources.



# Basic Skills.

- In KS1 there is an emphasis on using mental strategies rather than formal written methods.
- Have a go - how would you solve the following calculations mentally?

$$26 + 4 =$$

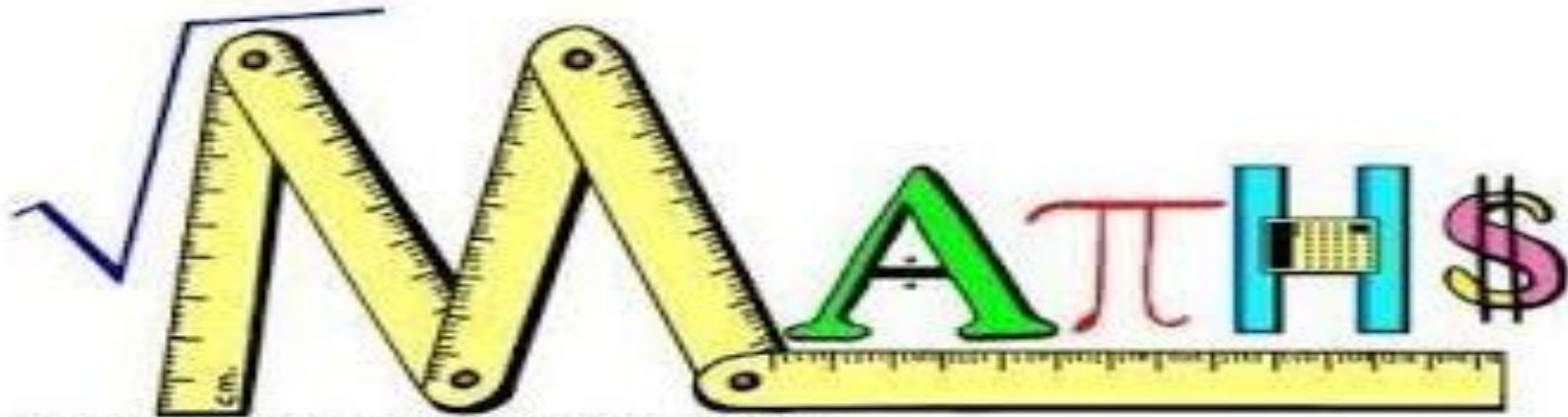
$$54 - 16 =$$

$$15 \times 2 =$$

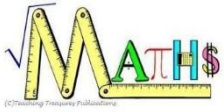
$$24 \div 2 =$$



What are Reasoning skills?  
Talk to your group.

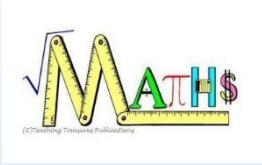


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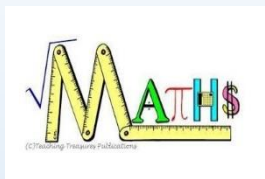
# Reasoning skills are:

- The ability to explain and reason ideas using the correct mathematical vocabulary - children should be able to use, read and spell mathematical words correctly.
- There is now a real emphasis on being able to reason mathematically. This could be by following a line of enquiry or solving a problem by discussing relationships and patterns and then developing an argument, justification or proof for their findings using mathematical language.
- For example:  $16 + 3 = 9$  Is it correct? How do you know?

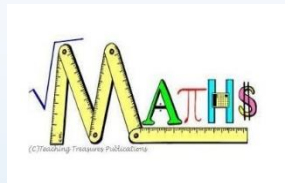


# How the Maths Curriculum is structured.

- The curriculum is divided into different units of learning, which are:
- Number facts and Place Value (includes counting, reading and writing numbers, comparing and ordering numbers, partitioning numbers and understanding their value)
- Addition and Subtraction
- Multiplication and Division
- Fractions
- Measurement (includes length and height, mass/weight, capacity and volume, time and money).
- Geometry (includes shape, position and direction)



# Year 1 - How maths lessons are structured.



# Year 2 - How maths lessons are structured.

- For each lesson, children are assessed and given work that will challenge them. This may change for different units of work, e.g. a child may access number and counting easily but struggle to understand time or shape.
- Where necessary there is a pre-assessment and this is used to group them for the correct work.
- If a child fails to understand a concept, they will revisit it the next day before moving on to the next challenge.
- If a child consistently finds a concept hard, they will move on and revisit it at a later stage.

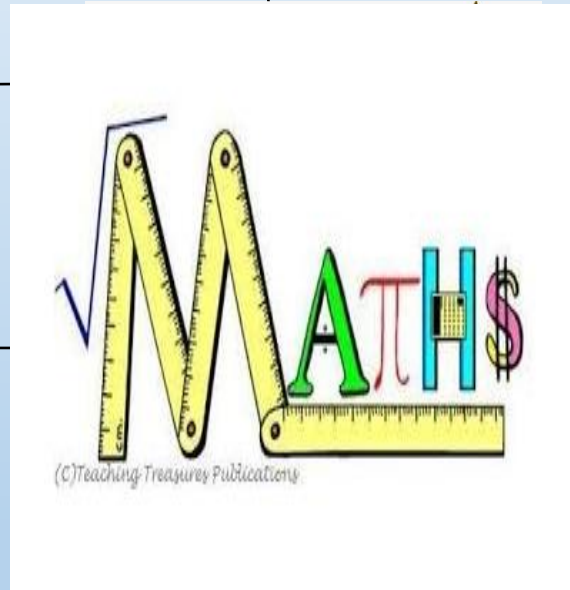
# How do we teach your child maths?

Questioning

Games, songs  
and videos

Reasoning (explain)

Practical activities



Basic skills ( + - × ÷ )

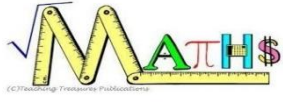
Using objects &  
pictures

Challenge



# Questioning:

- How many?
- How many more/less?
- How do you know?
- How could you work this out?
- Why do you think ....?
- What would you do if....?
- Did anyone do it a different way?
- If I have....what would...?



# Questioning:

Try the Question Challenge:

$$6 \times 4 = 24$$

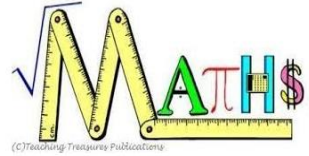
24 is the answer - what are the questions?

$$28 - 4 = 24$$

$$23 + 1 = 24$$

$$48 \div 2 = 24$$

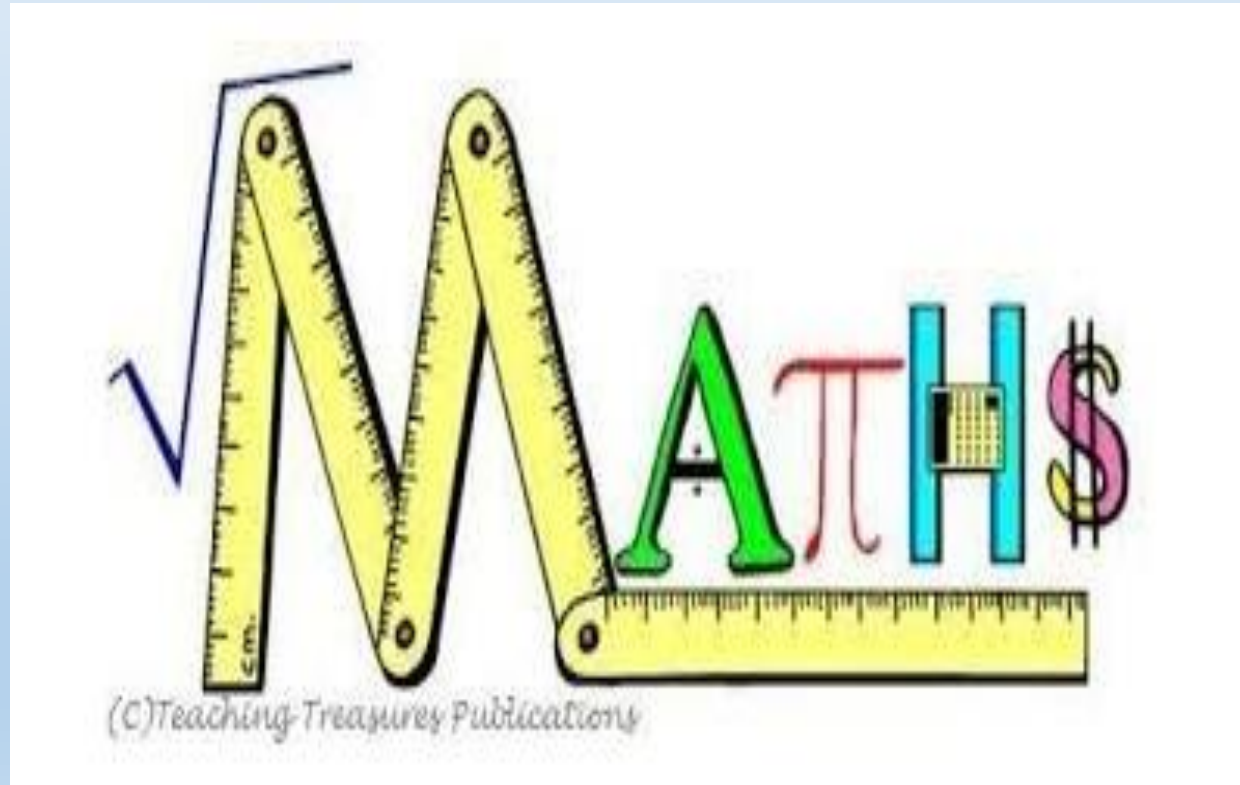


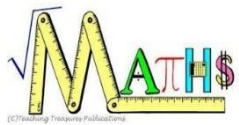


# Reasoning

- Solving word problems
- Problem solving using pictures
- Real life situations - e.g. telling the time, money
- Reading scales/number lines without all the numbers on
- Investigating mathematical statements
- Problem of the day

How do you support your child with their maths? Discuss as a group.





# How can I support my child with maths at home?

Practising telling the time with them. It needs regular practice!

Support them with their homework.

Cook with them - let them measure out and weigh ingredients.

Help them to learn their times tables.

Play maths games at home with them.

Give support and encouragement.

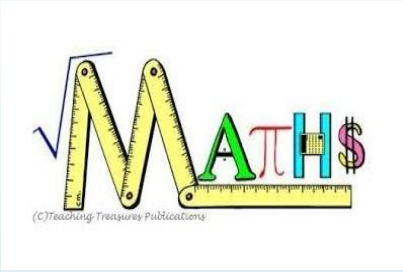
Make sure they know their number bonds to 10 and then 20.

Counting forwards and backwards in 1s, 2s, 5s and 10s.

Help them budget and work out change when spending their pocket money. Make sure they recognise coins and notes.

Ask effective questions.





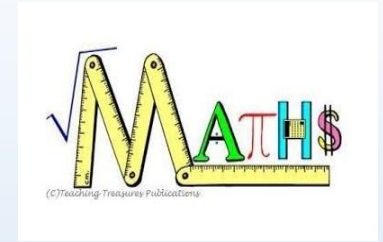
**Make it fun! Encourage your child to enjoy times tables songs, play maths games and engage with it. Make sure they do their best with their homework.**



# What do I do if my child is really struggling with maths?

- Make sure they know that everyone can do maths! Some people just need a little longer to feel comfortable with some concepts.
- Let them know that getting it wrong is alright - they can learn from their mistakes for next time.
- Find a quiet place for them to work. They can't concentrate with background distractions.
- If your child is struggling, don't tell them the answer. Ask them what they think they need to do to work it out and guide them to try different strategies to get to the answer.
- Liaise with their teacher.

# Interactive games to play at home - Top Marks:



Number bonds, times tables, counting, halving, doubling:

<https://www.topmarks.co.uk/maths-games/hit-the-button>

<https://www.topmarks.co.uk/maths-games/mental-maths-train>

Counting skills:

<https://www.topmarks.co.uk/maths-games/5-7-years/counting>

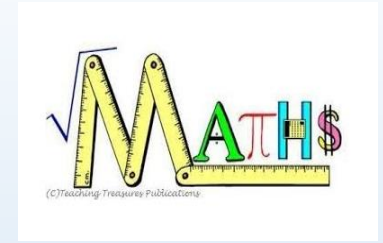
Ordering and Sequencing:

<https://www.topmarks.co.uk/ordering-and-sequencing/caterpillar-ordering>

Number facts:

<https://www.topmarks.co.uk/number-facts/number-fact-families>

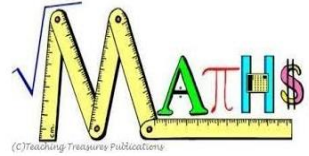
## Interactive games:



<https://www.timestables.co.uk/games/>

A variety of activities for addition, subtraction, multiplication and division can be found on Oxford Owl:

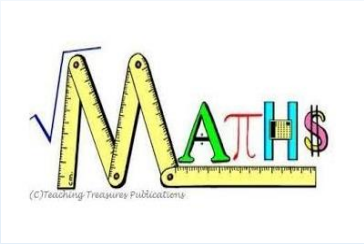
<https://www.oxfordowl.co.uk/for-home/kids-activities/fun-maths-games-and-activities/#maths-5-7>



# End of KS1 Tests

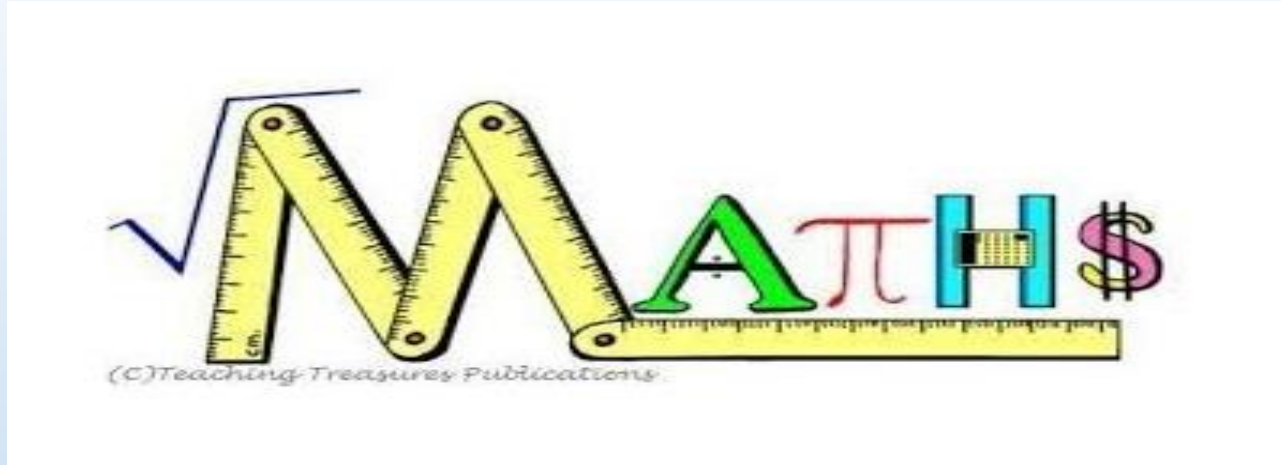
- At the end of Year 2, children have to undertake the statutory SATS tests.
- The maths test consists of 2 papers - arithmetic and reasoning (there are also 2 reading papers).
- These tests inform end of Key Stage assessment but do not dictate it - the teacher makes the assessment based on a child's classwork and assessments performed throughout the year.
- The tests are not emphasised with the children, they just see them as part of an on-going assessments they have throughout the year.
- **DON'T PANIC!** They will be fine!





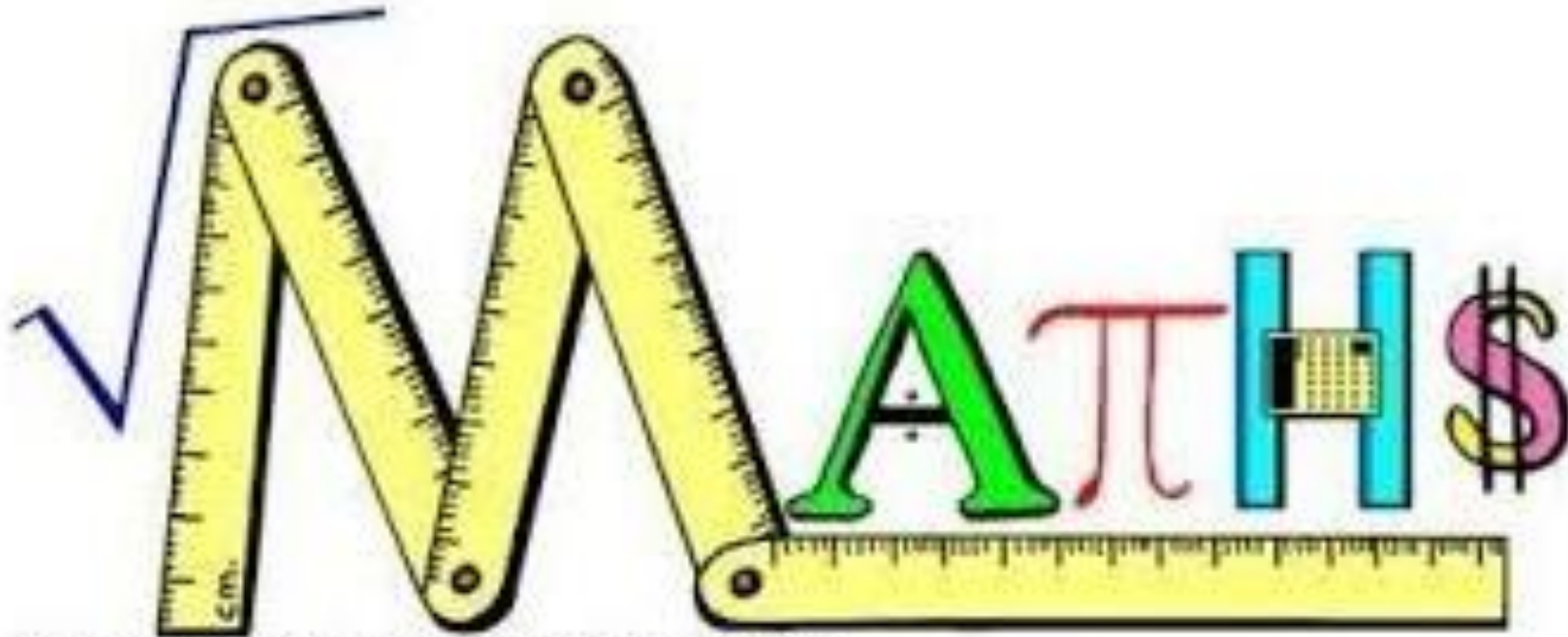
# Finally....

- Supporting your child with basic maths skills will really help them to achieve to their full potential.
- Your child's confidence in their ability will be greatly enhanced if they know their number bonds, times tables and have basic time/measuring skills and knowledge of money. These are all the back bone of what they learn in school.
- If your child knows the answer to a maths question - ask them to explain how they know it! It will really help their reasoning skills.



Please have a look at the maths calculation policy and some of the resources we use to teach maths at key stage 1.

Any questions?



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