Count to and across 100, forwards and backwards from any number.

Read and write numbers to 100; writing numbers to 20 in words and numerals.

Tell the time to the hour and half past the hour.

Count in multiples of 2, 5 and 10.

Find one more and one less than any given number.

Add and subtract one and 2-digit numbers within 20.

Measure and begin to record length, height, weight, capacity and time.

Know and use number bonds to all numbers within 20.
Mathematics at St Mark’s

Memory is the residue of thought.
Daniel Willingham

Maths is fun!
Why is maths so important?

- It is vital to lay secure foundations in early mathematics.
- We want children to engage with all areas of mathematics.
- To give children the tools to help them to develop a better understanding of the mathematical world in which they live.
Our aims are for children to...

- ...enjoy their Maths lessons
- ...be fluent in number, choosing the most efficient ways to solve problems
- ...take risks and be enthused by challenge
- ...feel like they can succeed and make progress
- ...be able to apply their knowledge in both Maths and other areas of the curriculum
- ...have a secure conceptual understanding of ideas
- ...recall important number and concept facts
- ...be able to reason Mathematically by explaining and proving
- ...be able to make connections and links between different areas of Maths
- ...have a deep and broad understanding of the curriculum
How we teach and support children’s mathematical learning at St Mark’s

• Daily whole class teaching of a concept to allow all children to master the learning.
• Practical exploration through a concrete, pictorial, abstract approach.
• Time for children to develop their fluency in a concept and practice.
• Spotting the maths around us.
Learning practically at school.

We use concrete resources and visual aids where possible to help children build a conceptual understanding in all areas of maths.

Linking the counting with structure

1232 + 3114

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There are 7 apples so the whole is 7.
4 apples are red so the red apples represent 4/7.
3 apples are green so the red apples represent 3/7.
For example...

Let’s make a number 1-10 using any of the concrete apparatus on the table.

Matching the digit cards to the resources connects the abstract and concrete.
Part-Part Whole Model

Diagrams can help children to understand and visualise the structure of numbers and number sentences.

The part-part whole model can be used to help represent the number.
Varied fluency and variation

The children show their understanding of a concept by representing in different ways.
The importance of vocabulary: reasoning and explaining.

• Stem Sentences

What could the five counters represent?

https://www.ncetm.org.uk/resources/49824

Not all Maths is just wrong or right. In order to show a deep understanding about a concept, children need to be able to explain their thinking using Mathematical vocabulary.
Numbers – calculating

The children use a variety of resources to solve addition and subtraction problems.

There are 7 apples so the whole is 7. 4 apples are red so the red apples represent 4/7. 3 apples are green so the red apples represent 3/7.
For example ...

Children will practise the procedure before applying it to problems, allowing them to deepen their understanding.
Fluency and Deeper Thinking

In order to embed skills and understanding, children will solve more complex problems which will deepen their understanding of a concept using language.
For example...

I can partition 2 digit numbers

Complete the part-whole model and write four number sentences to match.

28

\[
\begin{align*}
20 + 8 &= 28 \\
8 + 20 &= 28 \\
28 &= 8 + 20 \\
19 &= 20 - 1
\end{align*}
\]

Are there enough leaves for the caterpillars?
No, I read too many leaves.

Can the family all travel in a 6 seater car?
Explain how you know.

My family needs a bigger bus.
Learning their number facts and times tables is fundamental for solving more complex number problems as this knowledge is required for most areas of Mathematics.

National Curriculum - Statutory Guidance for multiplication and division tables

Year 2
Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.

Year 3
Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.

Year 4
Recall multiplication and division facts for multiplication tables up to $12 \times 12$. 

| $2\times$ | $3\times$ | $4\times$ | $5\times$ | $6\times$ | $7\times$ | $8\times$ | $9\times$ | $10\times$ | $11\times$ | $12\times$ |
Thank you for listening.

Any questions?
Join us back in the classrooms

I can partition numbers up to 10 in different ways.

• Resources will be out on tables – encourage your children to explain how they use them
• Encourage the use of stem sentences and language.
• Feel free to question their understanding – how do you know? Can you explain that to me?
• Please help your child to complete the learning but try not to do it for them – use resources and questions to support them.