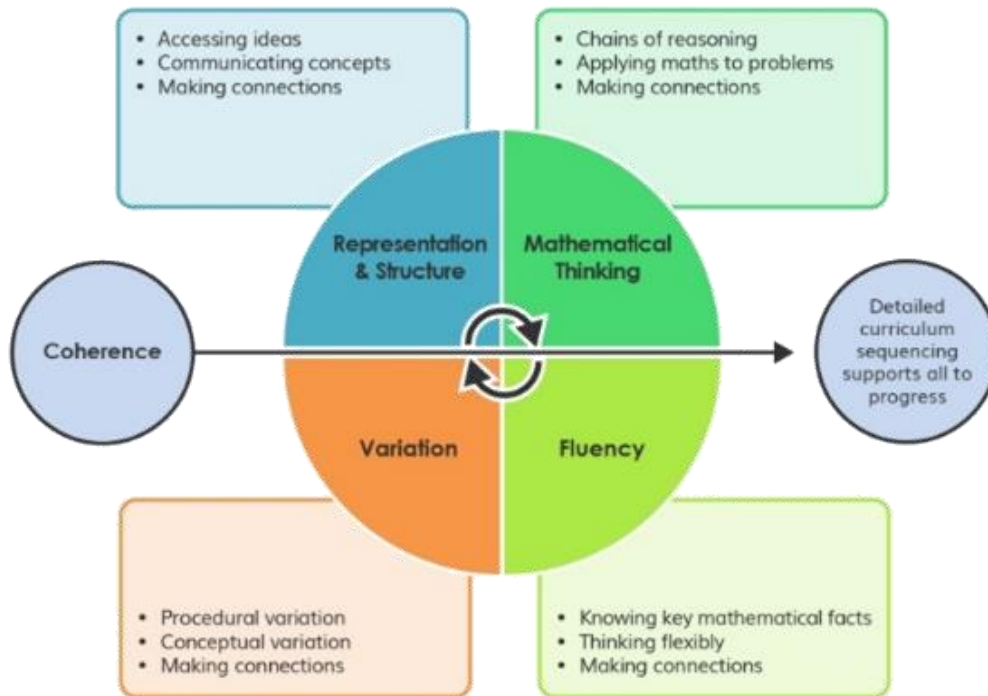


Maths at St Peter's - Teaching for Mastery



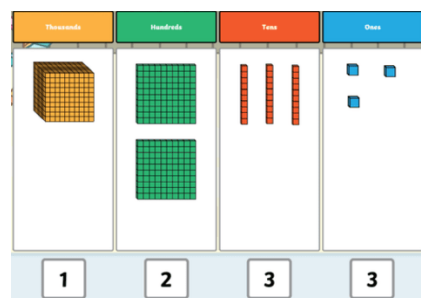
Our aim is for **all** children to **enjoy maths** and have a **secure and deep understanding** of fundamental mathematical concepts and procedures when they leave us to go to secondary school.

Teaching for Mastery – Five big ideas



Coherence - Teaching is designed to enable a coherent learning progression through the curriculum. This means that today's learning follows not only yesterday's, but previous weeks and previous years too. For example, children in year 3 first look at a number line to 1,000 before comparing and ordering numbers to 1,000.

Representation and Structure - Teachers carefully select representations of mathematics to expose mathematical structure and allow children to 'see' the mathematics. These become mental images that children can use to think about and discuss mathematics. For example, base ten allow children to see how many thousands/hundreds/tens/ones a number has. Below represents 1,233.



Mathematical Thinking - Mathematical Thinking includes looking for patterns and relationships, making connections, reasoning, and generalising. This might include knowing odd + odd = even,

recognising that 60 is 10 times bigger than 6 and therefore knowing that 40 is 10 times bigger than 4 and understanding that dividing by 4 is the same as dividing by 2 and 2 again.

Fluency - Efficient, accurate recall of key number facts (such as times tables and ways to make 100) and procedures (knowing multiplying by 20 is the same as multiplying by 10 and then by 2) frees children's minds to think deeply about concepts and problems. Fluency allows children to move between different contexts and representations (such as seeing 100 written or represented by base ten), to recognise relationships and make connections, to explain their ideas and to choose appropriate methods and strategies to solve problems. For example, if they know $12 \times 12 = 144$ they would be able to quickly solve 24×12 by simply doubling 144.

Variation - The purpose of variation is to draw closer attention to a key feature of a mathematical concept or structure through varying some elements while keeping others constant. The image below shows how the fraction three-quarters is 3 of 4 equal parts using variation.

