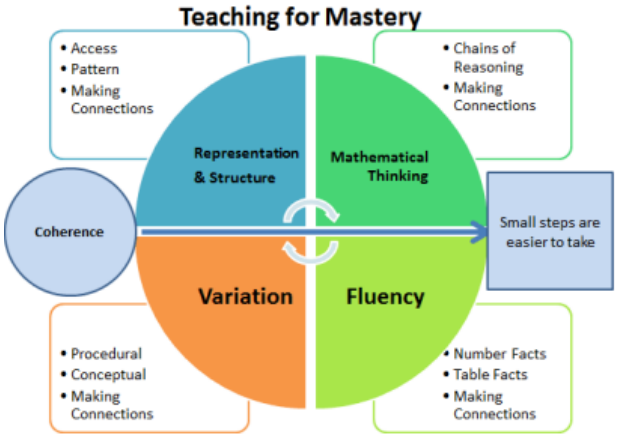
Mathematics Overview

Curriculum Intent	At St. Teresa's, we want our children to be confident, independent and resilient mathematicians. Our aim is to prepare our children for not only the next stage of their educational journey but also to prepare them for lifelong learning so that they can reason and problem solve successfully, as skilled and competent adults. In line with the National Curriculum, we want our children to: ● become fluent in the fundamentals of mathematics, through varied and fluent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall knowledge rapidly and accurately ● reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language ● solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of smaller steps and persevering in seeking solutions
Implementation	At St. Teresa's, Maths is taught through a mastery approach, using the 'White Rose Maths' scheme of work. Pupils are taught though whole-class interactive teaching, where the focus is on all pupils working together on the same lesson content at the same time, ensuring that all children master concepts before moving on to new content. This enables all pupils to progress through the programmes of study at broadly the same pace. Underpinning this, is the belief that all pupils can achieve in maths, no matter where they are on their journey. This ethos maximises the potential of every pupil's ability and academic achievement. We are working with our local Maths Hub on the

Primary Teaching for Mastery Programme to develop our teaching and learning throughout school. Within lessons, we use White Rose premium resources, interactive teaching tools and workbooks are used for years 1 to 6. Mathematics is taught progressively and sequentially across the school and begins the moment the children begin in Reception.

White Rose uses the Teaching for Mastery model developed by the NCETM.

NCETM 'Teaching for mastery'



White Rose is based on a small steps approach that keeps all learners together. It is designed to support mathematicians who require more time and visual representation to grasp fundamental concepts as well as those who require challenging further in their learning.

White Rose Resources help us to provide:

- CPA (Concrete / Pictoral / Abstract) representations
- Variation (Procedural / Conceptual)
- Logical and effective small steps
- Vocabulary
- Use of manipulatives (practical resources)

	White Rose resources support: • All learners through a whole class learning approach • EYFS stage learning • Visual representation designed to show concepts clearly • Re-visiting of concepts • Bar models and part whole models for problem solving • Clear progression of calculation • Fluency of calculation and concept Manipulatives are: • Used purposefully and appropriately • Available for appropriate lesson to build a mental picture of a mathematical concept • Manipulative use develops through concepts as the learner moves from EYFS to Y6
Measuring the Impact	• Children to be fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. • Children have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. • Children will be able to reason mathematically by following a line of enquiry and developing an argument, justification or proof using mathematical language. • Children understand the relevance and purpose behind what they're learning. • Children enjoy maths and understand that mistakes are ok and actually help to develop resilience and deepen understanding of concepts. • All children experience challenge and success in mathematics and celebrate the success of others. • Children use mathematical vocabulary confidently during lessons and when discussing their work with others. • Regular subject monitoring by the Mathematics subject leader to assess the impact of teaching and learning throughout the school. **Statutory testing:** Statutory testing takes place at the end of key stage one (year 2) and at the end of key stage two (year 6). The children complete arithemetic and reasoning tests. Key stage one tests are marked internally whilst key stage two tests are marked externally and results are published. Progress is currently measured by comparing these end of

	key stage results. From 2023 – 2024, key stage one tests will become non-statutory and a Reception Baseline Assessment will be introduced to track progress from reception to the end of year 6. **Attainment and progress data:** Children are assessed at the end of each block of work using the White Rose end of block assessments. Assessment data throughout the school is collected twice yearly and inputted into the Lancashire Pupil Tracker. **Subject monitoring:** The mathematics subject leader will conduct subject monitoring on a half termly basis. We use a range of monitoring methods to measure the impact of our maths curriculum across school. We are currently trialling the Pupil Book Study approach in the monitoring of subjects. The outcomes of each monitoring phase are discussed with SLT and staff, areas of strength and areas for development are identified and shared.