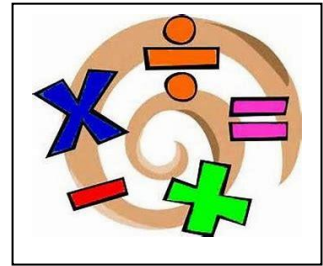




# Stowford School

## Curriculum Statement for Maths



### Intent:

The Stowford Curriculum for mathematics intends to ensure that all children:



become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that children develop conceptual understanding and the ability to recall and apply 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



can solve problems by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which children need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but children are helped to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They are also helped to apply their mathematical knowledge to science and other subjects.



### Implementation:

The White Rose maths scheme and premium resources are used for sequencing planning and is topped up with activities from Maths No Problem and the NCETM website.

**Teaching for Mastery:** The White Rose scheme is designed to support a mastery approach to teaching and learning and has been designed to support the aims and objectives of the National Curriculum. The units:

- have number at their heart. A large proportion of time is spent reinforcing number to build competency

- ensure teachers stay in the required key stage and support the ideal of depth before breadth.
- ensure children have the opportunity to stay together as they work through the schemes as a whole group
- provide plenty of opportunities to build reasoning and problem solving elements into the curriculum.

**Concrete -Pictorial-Abstract:** We believe that all children, when introduced to a new concept, should have the opportunity to build competency by taking this approach. - children should have the opportunity to use concrete objects and manipulatives to help them understand what they are doing. - alongside this children should use pictorial representations. These representations can then be used to help reason and solve problems. - both concrete and pictorial representations should support children's understanding of abstract methods. This includes use of the bar model.

**Small Steps:** Breaking the curriculum down into small manageable steps should help children understand concepts better. that teachers will try and cover too many concepts at once and this can lead to cognitive overload. In our opinion, it is better to follow a small steps approach.

**"Mathematical Talk":** Uses questions to encourage mathematical thinking and reasoning, to dig deeper into concepts.

The maths subject leader keeps up to date and develops subject knowledge for themselves and for staff. A whole schools view is gained by ensuring continuity and progression of skills. Through monitoring, the subject leader focuses on children learning and progress. This is based on learning walks, discussion with pupils and staff, looking at books and professional discussions. This then becomes linked to CPD and opportunities to share good practice.

The maths curriculum provides a rich experience for all children in which they can develop skills to explore, access knowledge and make connections across all learning.

**Assessment:** Formative assessment occurs in all lessons and summative assessment, in class after each block and formally three times a year. Data is analysed and gaps addressed. Planning is then adapted to the needs of the children. Same day intervention is used across the school so that children can keep up rather than catch up.



### **Impact:**

Maths is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. Our high-quality mathematics curriculum therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.