

# **Mathematics Curriculum Statement**

# Amended

November 2018	April 2021	July 2024
March 2019	September 2022	
November 2019	September 2023	

Striving for excellence, caring for all Within a loving and caring Christian environment

# "Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers."

Shakuntala Devi Shakuntala
 Devi (4 November 1929 – 21 April 2013) was an Indian mental calculator, astrologer, and writer, popularly known as the "Human Computer".



# Why we believe mathematics is important

Mathematics is an essential part of everyday life and its application forms part of our everyday society, even if it is not explicit. Maths is a creative and highly inter-connected subject, which provides solutions to some of the world's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. We provide a high-quality mathematics education aiming to give a foundation for understanding the world and the ability to reason mathematically. Additionally, the study of mathematics encourages a sense of wonder and appreciation for the complexities of the universe, fostering both intellectual and spiritual growth.

# Intent: We aim for our pupils to:

- reach their full potential- every child can achieve in maths
- foster a positive attitude and build resilience, recognising the creativity in maths and its relevance in everyday life
- become fluent in the fundamentals of mathematics
- solve increasingly complex problems
- reason mathematically by following a line of enquiry, conjecturing, identifying relationships, generalising and using mathematical language
- develop mathematical thoughts and ideas. We aim for pupils to be able to give clear and coherent mathematical reasons for their answers and to provide mathematical justifications, arguments or proof using mathematical language
- By the end of Year 6 we aim for our pupil's fluency to enable them to recall and apply knowledge rapidly and accurately.
- By the end of Year 6, we aim for out pupils to be able to solve a variety of routine and non-routine problems
  with increasing sophistication, including breaking down problems into a series of simpler steps and
  persevering in seeking solutions.

#### Implementation: How do we do this?

The current National curriculum document says:

'The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.' (National curriculum page 3)

- All pupils are taught in mixed attainment groups as we believe it is important to have high expectations for all pupils so that they are exposed to knowledge, skills and discussion relevant for their age group.
- Pedagogic practices that keep the class working together on the same topic, providing accessible starting
  points that build allowing all learners to gain deeper understanding of mathematical concepts and the links
  between them; this in itself presenting challenge for children who show quick proficiency and understanding

- CPD has been undertaken by the maths team, working as part of a Maths TRG group with our local maths Hub to ensure deep subject knowledge which can be used to support staff throughout school.
- Additional local and national CPD for the maths teams is regularly undertaken.
- CPD is planned strategically by the Maths Team to support staff and develop good subject knowledge
- Planning is supported through resources collated by the maths team.
- Long term gaps are prevented through speedy intervention.
- More time is spent teaching topics to allow for the development of depth and sufficient practice to embed learning.
- Pupils are supported and challenged through varied and frequent practice with increasingly complex problems over time.
- Pupils are provided with well-structured classroom activities involving interaction and dialogue (between teacher and pupils, and between pupils themselves). They may be presented orally, using equipment and/or as part of a group activity.
- A succinct Flashback 4 is delivered daily. This is a 5-minute session where pupils work silently and independently. This allows teachers to respond accordingly and give appropriate feedback.
- The encouragement of discussion, debate and the sharing of ideas and strategies adds to both the quality of the assessment information gained and the richness of the teaching and learning situation.
- Modelling is used to show responses in full sentences and children are expected to give their own responses in full sentences
- Progress in mathematics learning each year is assessed according to the extent to which pupils are gaining a deep understanding of the content taught for that year, resulting in sustainable knowledge and skills.

## **Impact**

- Pupils are making the best possible outcomes and progress
- Pupils show a positive attitude towards mathematics and their learning
- Pupils show resilience
- Pupils are able to offer explanations for their strategy of answers
- Staff feel confident planning and delivering maths lessons
- Maths Team is proactive in supporting learning and teaching

### This is monitored through:

- Book/planning monitoring
- o Drop-ins lead by the maths team
- Pupil interviews
- o Summative assessments
- o Analysis of data
- Discussion with Year Leaders/SLT

#### Other relevant documents:

- Calculation policy
- Curriculum overview for mathematics
- Teaching, Learning and Curriculum Policy
- Planning and resourcing documents- see One Drive drive
- AAT Maths Induction and Information Handbook