



Curriculum Intent at Manuden Primary School

Subject/Area:

MATHS

INTENT

Rational:

Mathematics is a tool for everyday life. It is a whole network of concepts and relationships that provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real-life problems. Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. Mathematics contributes to many subjects within the primary curriculum and opportunities are explored in order to draw mathematical experiences out of a wide range of activities, allowing children to use and apply mathematics in real life contexts. Mathematical skills are purposefully developed through the school's Creative Curriculum.

Ambition:

At Manuden, all children are taught daily Maths lessons from Foundation Stage to Year 6. During this time, basic mathematical concepts are embedded as early as possible in a child's learning journey. This equips them with the skills required to demonstrate a deep conceptual understanding of Mathematics and use this to support problem solving and reasoning strategies. Teachers ensure that concepts are modelled to pupils using multiple representations. This ensures that procedural and conceptual understanding are developed simultaneously.

Concepts

All children will . . .

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils 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.
- **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 simpler steps and persevering in seeking solutions.

All key skills are supported with the use of concrete, pictorial and abstract methods, allowing children to cement their understanding and learning in mathematical concepts.



Curriculum Implementation at Manuden Primary School

Subject Knowledge

The Mathematics Leader ensures that staff are supported to deliver high quality teaching with regular reading and research around new strategies and guidance. Triad working and participation in teacher research groups support the development of Maths subject knowledge and pedagogy across the school and the use of moderation ensure colleagues' subject knowledge and judgements Mathematics are accurate. White Rose Maths Hub progression and resources and a clear calculation policy ensures subject knowledge is consistent throughout the school. Through data analysis, gaps and barriers to learning are identified and closed, working closely with staff to achieve this.

IMPLEMENTATION OF MATHS

Subject Leadership

The Mathematics Leader shows a keen interest and passion for the teaching and development of Mathematics within school and has embedded the Mastery approach to learning. Through attending teacher research groups, the subject leader has focused on improving lesson structure with colleagues, allowing for high quality and consistent Mathematical teaching throughout the school.

Equitable Delivery

Quality first teaching in Mathematics at Manuden, allows pupils to access fluency, reasoning and problem solving during daily maths lessons and Maths is planned to meet the varied needs of all learners. All children have access to Mathletics and TT Rockstars at home and at school and through creative homework, children are able to complete a range of Mathematical tasks termly.

Planning the progression model

All classes have a daily mathematics Rose Maths Hub schemes of learning are used for medium term planning documents. The emphasis in lessons is to make teaching interactive and lively, to engage all children encouraging them to talk about mathematics. Lesson structures include the following elements:

- **DO IT** - opportunities to develop fluency through varied and frequent practice
- **TWIST IT** - opportunities for mathematical reasoning
- **SOLVE IT** - opportunities for applying their mathematics to a variety of routine and non-routine problems in a range of contexts

Breadth and Depth

Manuden uses a variety of teaching and learning styles in maths during each lesson. Groupings within classes are flexible and pupils will work in different groups dependent on their need. The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. Differentiation is achieved by emphasising deep knowledge and through individual support and intervention. In all lessons, learning objectives and success criteria are used and children have an opportunity to self-select their level of challenge.

Assessment

Each child's progress is continually assessed in line with National Curriculum objectives and expectations and informs day-to-day planning. We assess using a range of formative and summative assessment strategies Throughout the year, all year groups complete termly PUMA tests which inform Teacher Assessments judgements. Pupil Progress Meetings take place every half term and enable review and discussion of pupils' progress. This information is used to ensure appropriate intervention is in place to ensure that those children who are not working at age related expectations are provided with the support they need.