Maths

Intent

At Wheatcroft School it is our intent that we provide a high-quality mathematical education, which will ensure children move to the next stage of their education being numerate, confident and well equipped.

Through quality first teaching, we aim to unlock children's potential in maths and make it an engaging subject, which is accessible to all. Our intention is to show children that they can master the maths curriculum and that maths is an area where all children can experience success. We recognise the importance of being fluent in the fundamentals of maths and provide a variety of opportunities for children to practise their automatic recall to make it more rapid and accurate.

We deliver our Mathematics curriculum to ensure it follows the key aims of the National Curriculum. Our mathematics curriculum carefully sequences knowledge, concepts and procedures to build mathematical knowledge and skills over time. Our curriculum is linked to the DfE Ready to Progress criteria, ensuring that children learn the key knowledge to equip them for the next stage in their school journey.

Implementation

At Wheatcroft School, we follow a mastery approach to mathematics based on White Rose Maths and guidance from the NCTEM. We use the White Rose Maths programme as a basis for teaching across the school from Reception to Key Stage 2. Nursery children follow a curriculum based on the Early Learning Goals and linked to White Rose. Children in Key Stage 1 and 2 take part in daily mathematics lessons taught by their class teacher. Children in the EYFS have taught class or group maths sessions, guided and child-led maths based activities during the week. We ensure that Maths features prominently in the indoor and outdoor learning environment in all phases.

The White Rose mastery curriculum ensures that teaching follows a consistent approach across the school. Teachers teach units of carefully sequenced lessons, with learning planned in small steps. The approach includes the use concrete and pictorial representations to help strengthen children's learning, leading to a deeper understanding of maths. Teachers understand that all children benefit from this approach, including those with SEND or EAL. Children are taught to learn and recall key facts and to reason about concepts. They apply their learning to solve problems.

In all classes, there are children of differing mathematical ability. Teachers ensure through clear explanations, guided and independent practice and careful scaffolding that all children achieve the learning objectives and feel successful. Teachers extend pupils who have the requisite prior knowledge to think about concepts in more complex ways. We focus on deepening the learning within the objectives studied in a child's year group, rather than accelerating children through the concepts prioritised for older year groups. Where children are taught in mixed- age classes, teachers carefully plan their teaching to ensure both year groups achieve the age-appropriate objectives.

In addition to the daily whole class mathematics lesson, teachers may use shorter supplemental lessons to develop arithmetic and fluency skills. These may be whole class, in small groups or taught individually to students to embed concepts and ideas. For those pupils requiring additional support, interventions to close the gap in learning are provided.

Our maths curriculum provides opportunities for revisits of previously learned knowledge, concepts and procedures. This is to ensure that mathematical knowledge becomes deeply embedded in pupils' memories. We also prioritise the consistent use of precise and accurate mathematical vocabulary within lessons. One way we do this is through the use of 'Stem sentences'. Stem sentences are designed to improve the comprehension of maths problems and concepts for all learners.

We expose our students to mathematical thinking and concepts across the curriculum. We encourage home school partnerships in maths, particularly with home learning. Mathematical homework tasks are set regularly, both written tasks and the of use online resources such as Times Table Rock Stars.

At Wheatcroft School, we are developing a close relationship with the Matrix Maths Hub to understand and deliver innovative new approaches to teaching mathematics. This will allow us to continuously upskill our teaching staff to embed the Maths Mastery approach consistently.

How is Mathematics Assessed?

Teachers review pupils' contributions in lessons, work in their books and attainment in end of unit assessments. These assessments help teachers to identify gaps in learning. These are supported by end of term formative assessments.
In Early Years children are assessed against the Early Learning Goals.

Progress and attainment is recorded termly in through pupil progress meetings and reviewed by the Senior Leadership Team. The Maths Subject Leader monitors the quality of teaching and learning through lessons drop-ins, lesson observations, book looks and pupil voice. Maths targets are a key part of our School Development Plan.

Impact

At Wheatcroft School, we aim that our well-planned curriculum, mastery approach and consistent quality first teaching enable children in every phase to achieve or exceed age-related objectives and prepare them for the next stage of their mathematical learning, including preparing Year 6 for Year 7.

We aim for children to have:

- Quick recall of facts and procedures
- The flexibility and fluidity to move between different contexts and representations of mathematics.
- The ability to recognise relationships and make connections in mathematics
- An ability to use formal methods of calculation and mental methods as appropriate.
- Confidence when approaching mathematical problems.
- Positive attitudes towards their maths learning.

The school provides a range of wider opportunities to enrich the mathematics curriculum provided in the classroom, for example:

- Opportunities for the most able children to participate in additional challenges such as the maths challenge against other schools.
- Membership to Times Tables Rock Stars for Years 2-6.
- Cross-curricular opportunities where maths skills are applied across the curriculum.
- Use of interventions to support children with fluency or to embed key concepts.