

Grange Primary



School

Mathematics Policy

Updated: Autumn 2026

To be reviewed: Autumn 2027

Aims

At Grange Primary School, we believe that mathematics equips pupils with a uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways. Mathematics is important in everyday life; it is integral to all aspects of life and with this in mind, we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them.

It is vital that a positive attitude towards mathematics is encouraged amongst all of our pupils in order to foster confidence and achievement in a skill that is essential in our society. At Grange Primary School we follow the NCETMs Teaching for Mastery 2-year rolling programme. We are committed to ensuring that all pupils achieve mastery in the key concepts of mathematics, appropriate for their age group, in order that they make genuine progress and avoid gaps in their understanding that provide barriers to learning as they move through education. Assessment for Learning, an emphasis on investigation, problem solving and the development of mathematical thinking and a rigorous approach to the development of teacher subject knowledge are therefore essential components of the Grange approach to this subject

At Grange Primary School, our maths curriculum fosters a culture of deep understanding, confidence and competence in maths – a culture that produces strong, secure learning and real progress. Our aim is to create assured, happy and resilient mathematicians, who relish the challenge of maths and have lively, enquiring minds. Through our curriculum we 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 pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems
- 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 non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Our aim at Grange Primary School is to provide high-quality, meaningful teaching and learning experiences in mathematics so our children become enthusiastic, confident and independent mathematicians. Therefore, we will:

- set high expectations so our children will achieve their full potential.
- respond to our pupils' diverse learning needs in accordance with guidelines in the National Curriculum by providing a broad and balanced mathematics curriculum.

- ensure that children are taught following the elements of Teaching for Mastery to ensure a deep and thorough understanding of the mathematical principles they are learning.
- ensure that all children, no matter their ability, will be able to access age-appropriate mathematics lessons through scaffolding and meaningful representations.

Key areas within Mathematics

Early Maths

Children in EYFS receive Mastering Number sessions daily. Maths is built into the ongoing provision throughout each day and threaded throughout the wider curriculum. Children complete focused tasks weekly to consolidate their learning, which is evidenced in their books, and have many other opportunities to work towards the end of year Early Learning Goals. Throughout the day, children take part in number rhymes, songs and games to consolidate maths learning.

Arithmetic

In KS1 and KS2, children have the chance to practise arithmetic skills at the start of each mathematics lesson. This can either be a lead-in to the main topic being taught in the maths lesson or a stand-alone skill the teacher has noticed the children need support with. This is heavily based on the four operations and simple times tables, moving up to fractions, decimals and percentages work in upper key stage two. Teachers use formative and summative assessment to choose foci for arithmetic sessions, ensuring the pupils have a bespoke, tailored arithmetic curriculum.

Times tables

Children in year 4 have a times tables test towards the end of the school year. This tests the children's knowledge and recall of multiplication and division facts of all times tables (up to the 12 times table). Children practise times tables during arithmetic sessions, afternoon interventions and early morning work, and are set times tables to learn at home too.

Mastering Number

In years 1 to 3, children take part in Mastering Number sessions which take place separately from the maths session. These sessions are teacher-led and aim to secure firm foundations in the development of good number sense. The aim over time is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number.

Mathematical Thinking and Problem Solving

Mathematical Thinking is central to how pupils learn mathematics and includes looking for patterns and relationships, making connections, conjecturing, reasoning, and generalising. Pupils should actively engage in mathematical thinking in all lessons, discussing and communicating their ideas using precise mathematical language. These skills enable children to apply their knowledge to a range of problems - worded and practical - in maths lessons, the wider curriculum and beyond.

Oracy

Oracy in mathematics involves authentic listening, clear articulation, and the development of mathematical thinking. It is an essential skill that supports learning by drawing attention to mathematical structure and enabling all pupils to make connections. Purposeful talk, active listening, and effective communication are fundamental to thinking mathematically, establishing meaning, and developing deep understanding of key ideas.

Teachers play a central role in supporting pupils both in learning to talk mathematically and learning through talk. They help pupils express their reasoning, use precise language, and engage with mathematical structures. This dual focus sits at the heart of mathematical learning.

To achieve this, teachers intentionally design lessons that create opportunities for purposeful mathematical talk. They use generalisations, sentence starters, stem sentences, and encourage pupils to ask questions. A classroom culture is deliberately developed in which pupils think, listen, reflect, and respond to one another. This respectful environment relies on trust: trust that pupils will make mathematically worthwhile contributions, and trust that they can build understanding collaboratively — including learning to disagree agreeably.

Oracy is explicitly taught, and every pupil's voice is valued. Clear ground rules for communication are established, and talk becomes a natural part of mathematical behaviour. Through this, pupils learn not only to communicate their ideas but also to use language as a tool for revealing structure, making sense of mathematics, and deepening understanding.

Assessment

Work is marked throughout lessons by teachers and support staff to ensure that misconceptions are addressed promptly. This AfL is crucial in mathematics lessons and enables teachers to pull groups of children together to re-teach concepts or push children on to the next stage of their learning.

Children are assessed regularly to ensure they are making good progress and to identify and address gaps in learning. In years 1-6, children sit PiXL arithmetic and reasoning assessments 4 times a year. Data is collected and assessed after each assessment period, and pupil progress meetings are held to discuss progress, attainment, next steps and interventions that need to be put into place. This data is also used to inform maths and arithmetic lesson teaching, intervention and tuition groups and homework moving forwards.

Statutory assessments take place throughout the year in a range of year groups and inform teaching and learning throughout the children's time at Grange Primary School:

- EYFS 'Good level of development' at the end of the reception year
- Year 2 SATs assessments
- Year 4 times tables test
- Year 6 SATs assessments