



At Roding, we are 'Free to Achieve.'



Ambition



Compassion



Curiosity



Independence



Resilience



Respect

Mathematics

Curriculum Intent

At Roding Primary School, the maths curriculum is designed to equip all pupils with a deep understanding of mathematical concepts, ensuring that they have essential skills needed for life beyond primary school. Our maths curriculum aims to produce independent mathematicians through the development of logical thinking. In order to achieve this, teaching includes planned activities for reasoning and problem solving.

In line with the 2014 Primary National Curriculum, we teach pupils:

- **Number:** Number is the most important strand of mathematics, as without fluency in number, other strands of maths are often misunderstood. Number is everywhere in life (from budgeting money, to managing our time) and it is critical that children leave Roding with the confidence needed to navigate a more independent world.
- **Measurement:** Measurement involves aspects of maths such as time, money, weight and capacity. At Roding our intent is to teach children real world applications for number through measurement and to ensure they are confident applying their knowledge.
- **Geometry:** Geometry includes shape, position and direction. At Roding our intent is for children to acquire the knowledge and appreciation of these skills and how they can be applied in a variety of other subjects and real world jobs.
- **Statistics:** Statistics is the understanding of number in the context of data. Data is used across many subjects, particularly Computing and Science. At Roding, our intent is to teach children how to draw conclusions and understand the world around them.

Curriculum Implementation

The curriculum is a carefully sequenced to build upon prior knowledge, enabling coherent progression of skills from Early Years through to Key Stage 2. Each unit of learning has been structured to provide opportunities to revisit key concepts, thus reinforcing and deepening pupils' understanding over time.

White Rose Maths is used to ensure progressive hierarchy of skills from Year 1 to Year 6. Within the lessons, teachers plan activities for:

- **Fluency:** the fundamentals of mathematics through varied practice, enabling them to recall and apply knowledge rapidly and accurately.

- **Reasoning:** justifying their thinking, and developing an argument using precise mathematical language.
- **Problem solving:** applying their knowledge to a variety of routine and non-routine problems, breaking them down into simpler steps.

Nursery plan activities based on White Rose teacher guidance and Reception use the Mastering Number scheme for Number and White Rose for Measurement and Geometry. This blended approach allows for complete coverage of the curriculum and is progressive into KS1.

To achieve our ambitious goals, the teaching of mathematics at Roding Primary School includes the following:

- **Revisiting and Embedding Prior Learning:** Extra Maths sessions take place in KS1 and 2 for up to fifteen minutes outside the Maths lesson at four times a week. This is an opportunity for pupils to practice and consolidate learning (know more and remember more). Children are expected to recall number, arithmetic and time to ensure learning is not forgotten. KS1 follow the Mastering Number programme during Maths Meetings, progressing from the knowledge taught in Reception.
- **Technical Vocabulary:** Teachers explicitly teach the correct mathematical vocabulary at every stage, emphasising the importance of precision in both written and spoken communication. Vocabulary is revisited across different units, reinforcing understanding and application.
- **Assessment:** Pupils self and peer mark and are supported by the teacher to identify gaps in their learning and next steps. Misconceptions are addressed immediately or the next day and children make corrections in green pen. Teachers check self-assessment of pupils and correct in purple pen. Regular low-stakes quizzes and end-of-unit assessments are used to monitor progress and adapt future teaching.
- **Challenge for All:** Tasks are not differentiated by ability as we expect all children to be learning the same skills. However, we do extend and deepen their understanding through enrichment tasks and problem-solving challenges. Provision is made for children with Special Educational Needs or Disability (SEND) through scaffolded questioning, support and scaffolded tasks. The Engagement Curriculum is used for children who are significantly below age related expectations, which is designed and assessed by teachers and implemented through Teacher Assistants.

Curriculum Impact

The impact of our maths curriculum is measured by how well pupils can demonstrate their mathematical knowledge and skills. We aim for all children to leave Roding Primary School with:

- **Fluency in Mathematical Fundamentals:** Pupils are confident in their recall and application of key number facts and operations. They can approach mathematical problems and apply their mathematical skills and knowledge in everyday life situations.
- **Confident Use of Mathematical Vocabulary:** Pupils are able to articulate their understanding using precise mathematical language. They can explain their reasoning and justify their answers using the correct technical terms, demonstrating a deep understanding of key concepts.
- **Progression and Achievement:** All pupils make strong progress in mathematics, regardless of their starting points. Regular assessments show that pupils are meeting or exceeding age-related expectations, and those who require additional support

are making consistent improvements. By ensuring tasks are the same for the vast majority of pupils, children will keep up with their peers, rather than 'catch up' later on in life.

- **Problem-Solving and Reasoning Skills:** Pupils leave our school equipped with strong reasoning and problem-solving skills. They are able to approach unfamiliar situations with confidence, apply their mathematical knowledge in real-world contexts, and will be ready for secondary school.
- **Love for Mathematics:** We aim for pupils to develop a lifelong love of mathematics. By providing them with a broad and engaging curriculum, we ensure that they not only achieve academically but also enjoy exploring mathematical concepts. Children at Roding will aspire to become adults who choose jobs involving maths and will know just how many jobs require their skills.