

Mathematics Curriculum Statement

Curriculum Intent

At Roose, we strive to enable all our children to become competent mathematicians through a curriculum driven by inspiration, aspiration and living well. We aspire to embed the skills and processes necessary to enable children to use and apply their learning in a variety of contexts. We aim to develop children's enjoyment of maths and provide opportunities for them to build and secure a deep, sustainable, conceptual understanding of maths.

Our approach to the teaching of mathematics develops children's ability to work both independently and collaboratively. Through mathematical talk, children will develop the ability to articulate and explain their thinking and reasoning. By the end of key stage two, children will leave our school as emotionally resilient, lovers of mathematics which will enable them to thrive in their future lives. In order to ensure quick recall of number facts children will also take part in big maths sessions assessed with weekly CLIC and Learn It assessments.

Curriculum Implementation

After much consideration, we chose to continue to follow White Rose Maths Schemes of Learning to enable our transition to maths mastery teaching. We felt it provided a coherent learning progression through small steps, a range of representations and structures, opportunities for fluency, variation and opportunities for deep mathematical thinking (NCETM 5 key principles).

In maths at Roose, teachers:

- teach maths daily as a dedicated lesson.
- use WRM overviews to ensure appropriate coverage is achieved over the academic year.
- begin each new unit assessing the children's pre-requisites from their previous year to allow to plan for progression and close any gaps.
- enable all children to work to achieve their age-related learning intention.
- include a range of concrete, pictorial and abstract representations to enable deeper understanding.
- facilitate discussions interspersed with collaborative and explorative tasks which enable the teacher to gauge children's prior knowledge and unpick misconceptions.
- will instruct and model key learning.
- will provide guided learning for targeted children to enable them to access and succeed with their independent learning.
- provide relevant and purposeful independent learning opportunities. During this time, the teacher will use open-ended questions to assess and develop the children's mathematical understanding. Deepening opportunities are proved for those children who have developed the concept being taught.
- plan opportunities for a structured reflection at the end of each lesson.

- ensure that the content is taught at the same pace through differentiation of depth, rather than by acceleration to new content. The learning needs of individual pupils are addressed through careful scaffolding, skilful questioning and appropriate rapid intervention, in order to provide the necessary support and challenge.
- formatively assess throughout the lesson; the teacher regularly checks pupils' knowledge and understanding and gives live, verbal feedback accordingly and uses our new marking policy to ensure feedback is as instant and valuable as possible.
- In our Reception class, follow the EYFS curriculum. This entails a lot of 'hands-on' learning but, most importantly, we also plan carefully to ensure the children have concrete and pictorial experiences of number. Our intent is for children to become experts in the numbers 1-10. We want them to be confident with counting but it is also key for later mathematical development that they are beginning to add and subtract as well as show a deep, conceptual understanding of place value. We do this is by using a fun, innovative and practical approach following White Rose Maths guidance.
- In order to ensure quick recall of number facts children will also take part in big maths sessions assessed with weekly CLIC and Learn It assessments.

Curriculum Impact

The children will have acquired a deep, conceptual understanding of maths. They will be able to make connections between concepts and contexts. They will be able to articulate their understanding confidently. We evaluate the children's learning through a variety of formative and summative assessments to ensure our curriculum is effective.

A mathematical concept or skill has been mastered when a child can show it in multiple ways: -using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.

- Children demonstrate quick recall of facts and procedures. This includes the recollection of the times tables.
- The flexibility and fluidity to move between different contexts and representations of mathematics.
- The ability to recognise relationships and make connections in mathematics.
- Children show confidence in believing that they will achieve.
- Children show a high level of pride in the presentation and understanding of the work.

At Roose School we expect that by the end of Y6 our children: become fluent in the fundamentals of mathematics reason mathematically by following a line of enquiry, conjecturing relationships and generalisations. Solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication.