



Rawmarsh Ryecroft Infant School

Maths Policy

Last updated: October 2025

Due for Review: October 2027

This policy reflects the school's values and philosophy in relation to the teaching and learning of Mathematics. It sets out the framework within which teaching and non-teaching staff operate and gives guidance on planning, teaching and assessment.

The policy should be read in conjunction with the National Curriculum, EYFS Document and Calculation Policy, which sets out in detail what pupils in different year groups will be taught. This document is intended for all teaching and non-teaching staff with classroom responsibilities, Governors, parents, OFSTED, LA Advisors and interested others.

Intent

Curriculum Definition

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

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. During the Foundation Stage and Key Stage 1 pupils develop their knowledge and understanding of maths through practical activity, exploration and discussion. They develop a range of mental calculation skills and use these in different settings. They learn about shape and space through practical activity which builds an understanding of the immediate environment. They begin to grasp mathematical language, using it to talk about their methods and explain their reasoning when solving problems.

Maths is taught daily, with teachers sharing clear learning objectives with the children. Teachers use a range of teaching styles incorporating:-

- direct teaching
- a high proportion of whole class oral/mental maths sessions
- group/paired work
- individual work
- independent tasks

Aims for the Teaching of Mathematics

At Rawmarsh Ryecroft Infant School we aim:-

- To raise standards in mathematics through high quality teaching and learning.

- To develop skills which enable children to use and apply number, measure, shape and space and handle data with competence and confidence in a range of contexts.
- To develop children's fluency 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.
- To ensure children can reason mathematically by following a line of enquiry, understanding relationships and generalisations, and developing an argument to prove a maths point using mathematical language.

To provide reasoning and problem solving opportunities whereby children are able to apply their mathematical knowledge, including breaking down problems into steps and persevering in seeking solutions

- To provide a stimulating and challenging mathematical environment with well planned work to interest and motivate children and develop children's confidence and enjoyment of mathematics for life.

Implementation

Teaching and Learning

The curriculum for mathematics is as set out in the National Curriculum and EYFS Documentation with the focus of teaching in Key Stage 1 being to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the 4 operations, including with practical resources [for example, concrete objects and measuring tools]. At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money. White Rose maths resources are used to support teaching and learning. We ensure that learning is sequential and uses small steps to support children to master each mathematical concept.

By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. Pupils should read and spell mathematical vocabulary, at a level consistent with reading and spelling at Key Stage 1.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between mathematical ideas. Maths is always taught as a discrete subject with links made with other areas of the curriculum where appropriate.

The expectation is that the majority of pupils will move through the learning at a

similar pace. Children who grasp concepts rapidly should be challenged through problems and reasoning before being taught new content. Those who are not sufficiently fluent with earlier material or have a specific SEND will consolidate their understanding, including through additional practice, support and scaffolded learning.

Maths Mastery at Ryecroft

At Ryecroft the maths curriculum is taught through a mastery approach:

We believe ...

- that number is at the heart of our maths learning. A large proportion of time is spent reinforcing number to build competency.
- that it is important to challenge and extend pupils, ensuring that a depth and breadth of each key concept is gained.
- that time should be given to build reasoning and problem solving elements into the curriculum.

All students, when introduced to a key new concept within Maths, will have the opportunity to build competency in this topic by taking the approach Concrete - Pictorial - Abstract, described below.

Concrete - children will have the opportunity to use concrete objects and manipulatives to help them understand what they are doing.

Pictorial - children will then build on this concrete approach by using pictorial representations. These representations can then be used to reason and solve problems.

Abstract - with the foundations firmly laid, children will be able to move to an abstract approach using numbers and key concepts with confidence.

Mathematics Curriculum Planning

Long term / medium term planning - All learning is planned using objectives from the National Curriculum and the Early Years Foundation Stage (EYFS) Statutory Framework with lessons building upon prior learning from the previous year.

Milestones from the curriculum progression map are set out on the medium term plan that is lead by the subject lead and this is then utilised by class teachers to include into their weekly plan. At the end of Key Stage 1 information on children's current attainment and progress is shared with Year 3 teachers in order to facilitate smooth transition for our pupils.

Short term / weekly planning - Completed prior to the start of the week for the whole week, building on from prior learning and assessment. Assessment outcomes to inform the next lesson and this will reflect in planning adaptations. Weekly planning to be shared with all non-teaching support and displayed within the classroom. Sticky

knowledge checks and resources are carefully planned for each lesson and learning is scaffolded to meet the needs of the individual learners including those with SEND.

Language In The Mathematics Curriculum

The mathematics curriculum reflects the importance of spoken language in pupils' development. The quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting a mathematical evidence. They must be assisted in making their thinking clear to themselves as well as others, and teachers should ensure that pupils build secure foundations by using discussion to support misconceptions.

Impact

Monitoring and Assessment/ Moderation

The maths subject leader, alongside the assessment lead, is responsible for ensuring that maths assessment is rigorous and reliable. Maths assessment is moderated internally by school and with other KS1 and FS2 colleagues in other settings. This helps to ensure judgements are accurate and inline with national expectations.

At Ryecroft the assessment of mathematics consists of:-

- Foundation Stage baselines / End of year profile
- Foundation Stage Evidence file
- Key Stage 1 Assessment Materials
- Teachers' own on-going assessments
- Daily formative assessment
- Maths assessment proformas
- Pupils work
- NTS Assessment papers

Ongoing marking and feedback by teachers and teaching assistants is provided for children in maths lessons to immediately challenge misconceptions and provide opportunity for children to improve upon their learning evidence. Children who need additional support on the learning within a lesson are supported immediately or a PM intervention is provided.

Termly assessment results are recorded using the EMAG System. This information on attainment and progress is analysed by staff and discussed with SLT at Pupil Progress Meetings to support the delegation of interventions. They are used to determine rates of progress against average expectations and are used to set percentage and numerical targets.

Assessment in mathematics is shared formally with parents at meetings held three times per year. Records of Achievement contain a Maths section with a

broad target for the next year.

Inclusion

Ryecroft Infant school is an inclusive school in every sense and ensures policies and procedures are in place to promote this. Children experiencing difficulties learning mathematics will be set specific targets on an Gateway for Learning Plan which will be reviewed each term. When possible, children may receive additional adult support, either 1-1 or in a small group. They also may have the opportunity to attend 'Ready to Learn' groups.

All children have equal access to maths activities regardless of race, religion, gender or ability. All activities will be planned in such a way as to appeal to all and careful consideration is given to the learning materials provided ensuring all people are represented and stereotypes avoided.

Health and Safety

Learning in maths can take many forms and children may undertake more creative activities such as baking or collage as part of their Maths. Care should be exercised when children are using scissors and tools during a lesson. Any potential dangers should be discussed with the children. When using food, all hygiene rules should be clearly observed and all adult helpers must be conversant with the standards expected. Children must not be left unattended near the cooker or be allowed to use the oven.

EYFS

The maths curriculum for the Foundation Stage is as set out in the EYFS document. This includes the headings 'Mathematics - Numbers' and 'Mathematics - Numerical patterns' Mathematical understanding is developed through stories, songs, games and imaginative play alongside focused teaching. White Rose maths resources are used to support teaching and learning. Children are taking part in a daily oral and mental activity on the carpet and access a focus group across the day throughout their time in FS2.

E- Safeguarding

Technology is an important and essential part of the learning experience. We are committed to ensuring that our children leave with the skills and knowledge that will help them to thrive in our digital age.

Children use a range of technology and it is vital that we teach children how to use this valuable resource safely. All staff have regular and up to date training, they can recognise and are aware of online safety issues. Children are aware of how to report issues or concerns to staff. Staff check all materials and resources before use and adhere to all safeguarding policy when using online content to support teaching and learning.

Links to other Policies

This policy is closely linked to our calculation policy which explains the skills and knowledge we expect children at each stage. It also informs staff of how calculations should be taught and the related vocabulary. We look for these skills to be embedded before children move on to ensure there are no gaps in their learning.