



Ryedene Primary and Nursery School

'Growing together to succeed'

Mathematics Policy

The National Curriculum states:

"Mathematics is a creative and highly inter-connected 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."

Introduction

These days it is common to hear people say they are, 'no good at Maths' or that they, 'can't do Maths!' At Ryedene Primary and Nursery School, we aim to foster a 'can do' attitude towards Maths. If we feel we can't do it, the sentence is always followed with YET! "I can't do it yet!" This makes us believe we will be able to do it, we just haven't quite learnt all the skills we need to solve the problem. This growth mind-set approach towards Maths helps us all to achieve more than we believe we can. As children become fluent in the language of mathematics and become increasingly able to reason and explain their thinking mathematically, they become increasingly able to solve problems in a range of contexts, noting connections between areas of maths and proving their answers by using a wide range of mathematical thinking.

At Ryedene Primary and Nursery School, the teaching of Maths aims to enable each child to develop their learning and achieve their full potential. We endeavour to not only develop the mathematics skills and understanding required for later life, but also to foster an enthusiasm and fascination about Maths itself. We aim to increase pupil confidence in Maths so they are able to express themselves and their ideas using the language of Maths. We want the children to see mathematics as being relevant to their world and applicable to everyday life as well as being something that they will need as they move on through their school life and ultimately to the world of employment.

The purpose of this policy is to ensure a consistent approach throughout the whole school. Great importance is placed upon this Mathematics Policy as it sets the expectations and aspirations for Maths within for our school.

Aims and Objectives

Our aim, which is based on the aims of the National Curriculum, is to ensure that all children:

- Become **FLUENT** mathematicians
- **REASON** and **EXPLAIN** mathematically
- Can **SOLVE PROBLEMS**

Children need to be regularly exposed to increasingly complex problems to solve, which allow them to apply their maths knowledge. In doing so, they are encouraged to develop an argument and line of enquiry which they can prove and justify using mathematical vocabulary.

At Ryedene Primary and Nursery School we teach Maths in a way that:

- creates a lively, exciting and stimulating environment in which the children can learn Maths
- promotes the concept that acquiring maths knowledge and skills provides the foundation for understanding the world around the children
- develops mental strategies
- encourages children to use mathematical vocabulary to reason and explain
- allows time for partner talk in order to stimulate and develop a curiosity for Maths
- challenges children to stretch themselves and take risks in their learning
- creates a sense of awe and wonder surrounding Maths
- ensures children in Key Stage 1 are secure in their understanding of number and number relationships
- delivers Maths in line with National Curriculum guidelines.

We follow the scheme of study devised by the White Rose Maths Hub but also use a variety of curriculum resources, including the National Curriculum Programmes of Study, Nrich and NCETM (National Centre for Excellence in the Teaching of Mathematics) resources which ensure continuity and progression in the teaching of mathematics. Our Calculation Policy details methods used to teach calculation and progression in addition, subtraction, multiplication and division.

It is important that children have opportunities to explore Maths and present their findings not only in a written form but also visually; to that end, the school adopts the 'CPA approach': concrete, pictorial, abstract. This will allow the children to experience the physical aspects of Maths before finding a way to present their findings and understanding in a visual form before relying on the abstract numbers. There are manipulatives available in every classroom to help facilitate this process. The curriculum is delivered by class teachers. Children are taught in class groups from Foundation Stage to Year 6. In all classes, children are taught in a variety of groupings (whole class, groups, pairs, one to one) relevant to the task in hand and work is

scaffolded in order to make it accessible and challenging. Where appropriate, groups/individual children are supported by Learning Support Assistants. Collaborative learning sessions are also planned for to encourage children to work together and talk 'Maths'.

The school has developed a mastery approach to teaching which has been customised to meet the needs of our children. Staff are kept up to date on current thinking, new teaching methodologies and ideas by the subject leader through staff meetings and Inset training. CPD and support is available for staff who need to improve their understanding of the requirements of the National Curriculum, new methodologies and assessment/testing arrangements.

Planning and Assessment

Maths is taught daily for one hour and teachers use the White Rose Maths Hub scheme of work as a basis for their planning. The time structure of this scheme is used as a guideline only but teachers are mindful of the end of year objectives that children are expected to achieve. Teachers plan and deliver lessons that suit the individual learning needs of the children within the group, whilst adopting the CPA approach. They use their professional judgement and use of formative assessment to ensure a flexible approach is adopted which recognises the need for pace of learning within the classroom. Children are given the opportunity to engage in fluency, reasoning and problem-solving activities on a daily basis to demonstrate their understanding. In order to inform planning and to assess children's progress, teachers will carry out a range of summative and formative assessments and keep a record of the achievement of the end of year objectives.

At the end of each term, children will complete Arithmetic and Reasoning assessments based on what has been taught during that term. Year 6 will complete practice SATs papers to prepare them for the Statutory tests in May. Year 2 will also complete past SATS papers to use as a benchmark. White Rose Maths end of unit assessments will be completed by the children and teachers will use these as a gap analysis exercise; this information is then used to inform planning. Learning times tables facts is also a key focus for our children and TTRockstars app is used to engage and challenge the children.

Marking and feedback

AFL during a lesson and marking children's work allows teachers to identify children that may need any necessary intervention, including 'same day intervention' to ensure that children are able to make progress in maths.

Children are provided with feedback either verbally or through written marking in line with the school's Marking Policy. Intervention and split input sessions take place in lessons enabling all children to make progress. Every piece of work is stamped after marking to show whether the work shows evidence of:

- LO not met
- Working towards LO
- LO met

Targets are given once each half term and will be used to assess children's understanding of the units that have been taught. Any corrections are expected to be completed by the children at the start of the next lesson and these will be completed in purple polishing pen.

Inclusion

In line with the School's Inclusion Policy each child has an equal entitlement to all aspects of the Maths curriculum and to experience the full range of Maths activities. Therefore, in delivering Maths, care will be taken to ensure that all learning needs are met to ensure all children keep up with the learning and any gaps are addressed. Intervention groups may take place outside of the Maths lessons; these sessions will be delivered by a learning support assistant and may involve individual or small group work.

Parents and Carers

It is important that parents and carers are actively involved in the children's education. In order to help keep them informed of what is happening within school, parent workshops will be run on a termly basis to share strategies and any new methodologies for delivering the Maths curriculum and also any statutory changes such as to the curriculum or assessment/testing arrangements.

Homework

Homework for Maths will be set and marked in accordance with the school's Homework Policy and will consist of tasks being set online using the MyMaths app.

The role of the Mathematics Lead

The role of the Mathematics Lead is to:

- Prioritise improvements for the teaching and learning of mathematics across the school and, in consultation with the Headteacher and Governing Body, drive forward the improvement of Mathematics teaching as well as the progress and achievement of learners
- Track the progress of all groups of children, reporting findings to the Headteacher and Governing Body
- Audit provision for Mathematics across the school in terms of teaching and learning, resources, standards on a regular basis
- Lead regular Insets and CPD activities to support staff in developing areas of Mathematics
- Keep up to date with changes and trends with regard to the teaching of Mathematics, making informed changes to teaching in Ryedene when appropriate
- Know and understand how children become numerate and communicative
- Ensure that appropriate resources are available to ensure children are able to learn with a hands-on concrete approach
- Attend termly Subject Leader meetings

Review

This policy will be reviewed every three years or sooner if considered necessary.
Next review September 2028