



Mathematics Policy 2025-27

Curriculum Intent

School Vision/Intent

Our Maths curriculum is taken from the Red Rose Lancashire Scheme. It is based on the concept of mastery, where the founding principle is that all are capable of attaining in Maths. They build from the concrete, through to the pictorial and finally the abstract.

There are five key principles:

1. Coherence
2. Variation
3. Mathematical Thinking
4. Fluency
5. Representation and Structure

From Autumn 2025, this scheme forms the basis of our maths teaching in school, providing us with a structure which we adapt and personalise for our children. We believe that children should have five key characteristics: resilience, persistence, getting along, organisation and confidence. The Red Rose Maths Scheme fits well into these five key characteristics, building on them and allowing children to blossom in their mathematical learning.

Intent for Mathematics

Stepping Stones Short Stay School seeks to broaden children's experiences, ensuring that they build personal characteristics alongside strong academic progress. We do this through a first-hand learning approach wherever possible, so that children learn key characteristics for success, as well as teaching core skills and knowledge associated with each subject. In Maths, this means that we teach new concepts and address misconceptions through use of concrete representations, by using manipulatives.

Our Maths lessons at Stepping Stones aim to teach children a fascination and curiosity about the mathematical world. Maths is vital within our lives and we believe that all children should be taught sound mathematical thinking with automaticity of key knowledge. We consider maths skills to lead to a strong foundation for the next stage of children's lives, giving them solid foundations in maths. Our maths curriculum builds new knowledge in a spiral curriculum. This allows them to make links with prior knowledge and delve deeper as they progress through the units to build a holistic and deep understanding of the mathematical world.

Aims of the Curriculum

The National Curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including 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.
- 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 nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

At Stepping Stones, these aims are developed in tandem with each other. However, a key focus in every lesson is deep conceptual understanding, and it is from this that children will build their fluency, their ability to reason and apply this understanding when solving problems.

Curriculum Organisation

At Stepping Stones School, we use the Red Rose Mastery Maths Scheme and have selected this because it is sequenced coherently across and within year groups. Children revisit topics on a termly basis building on their prior learning and moving towards clear end of year expectations. The key components of place value and calculation are explicitly taught and learned in each term. These topics are interspersed with other areas of the mathematics curriculum such as measurement including time and money, statistics and geometry. This allows children to apply their number knowledge in different contexts to build strong connections within mathematics and appreciate the subject's relevance to real life. It also supports children in transferring their learning to long term memory in order to unconsciously recall and apply it in different situations, including in different curriculum subjects.

In Early Years, the Red Rose Mastery Maths Scheme is accessed and implemented. This provides end of year expectations for the whole mathematics curriculum to ensure children are ready to access the National Curriculum in Year 1. This learning is organised into progressive steps that build a coherent sequence of learning across the year. It begins in the autumn term with children being immersed in the numbers 1-10 through the Numberland approach in which children develop a deep understanding of each number, including composition and how these numbers relate to each other. The expectation is that all children will move through the content of our curriculum (in all Key Stages) at broadly the same pace. We maintain high expectations of all children and provide support and challenge as appropriate throughout all lessons and sequences of learning.

The mathematics curriculum is enriched at Stepping Stones through cross-curricular experiences (e.g. Science with use of graphs and handling data), Enrichment – use of measuring with baking/cooking and woodwork, EYFS outdoor provision (balancing scales with sand, hopscotch, 3-D construction, patterns, counting, songs). As well as the discrete maths lesson, there are opportunities for children to rehearse mathematical knowledge and understanding at other times of the day.

Curriculum Implementation

Mathematics is learned discretely through daily lessons in all year groups and is then applied across the curriculum and in continuous provision in EYFS.

A typical lesson in Years 1 to 6 following the Red Rose Mastery Maths Scheme would involve:

- a Starter activity to allow children to revisit, practise and refine previously learned content to support long term memory retention as well as developing children's mathematical fluency

- an Initial Problem in which children are introduced to the learning through a context. The children discuss how their existing knowledge can be applied to the context. Ideas and approaches are shared where misconceptions are identified and addressed, and effective approaches are shared and learned by the whole class
- Guided Learning that is interactive through the use of effective questioning that leads children to identify for themselves how to be successful with the learning. This is supported through the use of both conceptual and procedural variation and short tasks for the children to complete before moving on to the next step in learning
- an Independent Learning Task for the children to apply the learning from the guided parts. This task includes questions that build children's understanding and fluency and will also involve different elements of reasoning and solving problems.
- a Deeper Learning Task is included to allow some children to take their understanding to even greater depth than what would be expected. These tasks are often in the form of more complex reasoning or non-routine problem solving questions.
- throughout the lesson, children's thinking is supported and extended through the deliberate use of questioning by the adults. A variety of approaches are used within our lessons including practical exploration, group discussion, paired work and individual work.

In Early Years, mathematics lessons consist of a short taught element to the whole class. This will be very practical, playful and involve a considerable amount of discussion including questions such as What can you see? What do you notice? Why do you think that happens? What would happen if...? Children will then be given opportunities in continuous provision to apply this learning in different ways. Mathematics is also experienced through many daily routines and the adults take advantage of all the opportunities for mathematical learning in such activities as registration, snack time and tidying up.

Planning

The planning of the curriculum is organised in three phases:

- **long term planning** is demonstrated through the yearly overviews which show the organisation of the mathematics topics across the year for each year group, and the coverage and progression of knowledge, skills and understanding;
- **medium term planning** is demonstrated through the half termly overviews which reveal the progression of knowledge, skills and understanding within each topic, including where learning is revisited in Starters for year groups using the Red Rose Mastery Maths Scheme;
- **short term planning** is demonstrated through the teachers' lesson plans which explain how children will build on their existing understanding with the new learning specified as focused learning objectives for each given lesson.

Professional Development of Staff and Use of Resources

All teaching staff using the Red Rose Mastery Maths Scheme have had training on the scheme and understand the principles of teaching for mastery and how to apply the scheme appropriately with their class. In all classes the mathematics learning is reliant on practical and visual approaches, and the links between these and the abstract representations. At Stepping Stones, we are committed to ensuring all our staff are equipped and supported to deliver consistent high quality learning experiences for our children.

Impact

Monitoring of the Implementation

The subject leaders continuously monitor by observing teaching, work scrutiny, pupil interviews and walk-throughs.

Termly Summative Assessments

Children's learning is assessed summatively at three main points in the year:

Autumn term - December

Spring term - February

Summer term – July

In addition to this on arrival to Stepping Stones children undertake a summative assessment to gather a baseline of the child's knowledge.

Formative Assessment

Teachers use their professional judgement to decide what children need to learn and when to move on to the next step of learning. Formative assessment (or responsive teaching) is a key feature of the mathematics lessons. Teachers use effective questioning to determine the extent of children's understanding before deciding on what the children need next (support, extension, next step).

SEN/Inclusion and the Mathematics Curriculum

All children should have equal access to the curriculum, irrespective of particular circumstances such as race, background, gender and capability. In the daily mathematics lesson, we ensure this by supporting children in a variety of ways: E.g. repeating instructions, emphasising key words, using picture cues.

In line with the school policy on Special Educational Needs, the SEN co-ordinator, Mathematics co-ordinator and the class teacher will be involved in ensuring that pupils will have work planned to meet their needs. Classroom assistants will also provide additional support. We have a high expectation of progress that we expect from our children regardless of their BSE needs and this is reflected in the accelerated progress we support our children in making.

This policy should be read in conjunction with:

Mathematics Calculation Policy

Curriculum Policy

Teaching and Learning Policy

Assessment Policy

Inclusion Policy

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