Redesdale Primary School

Mathematics Policy

Policy reviewed:	June 2022
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Policy review date:	June 2025

REDESDALE PRIMARY SCHOOL

Mathematics Policy

CURRICULUM INTENT

Introduction

At Redesdale Primary School we believe that all pupils can achieve in mathematics. We believe that at each stage of learning, children should be able to demonstrate deep, conceptual understanding of a topic and build on this over time. We want children to be able to not only recall and use the maths taught but to also be able to transfer and apply it in different contexts, being able to reason and problem solve. This deep learning is what we are aiming for by teaching maths using the mastery approach.

The teaching of maths at Redesdale embraces all our wider Curriculum Drivers and we believe that within and through our maths teaching we can:

- Spark a **love of learning**.
- Enrich learning with **real-life experiences.**
- Develop **life-long communicators.**
- Foster **emotionally intelligent** individuals.

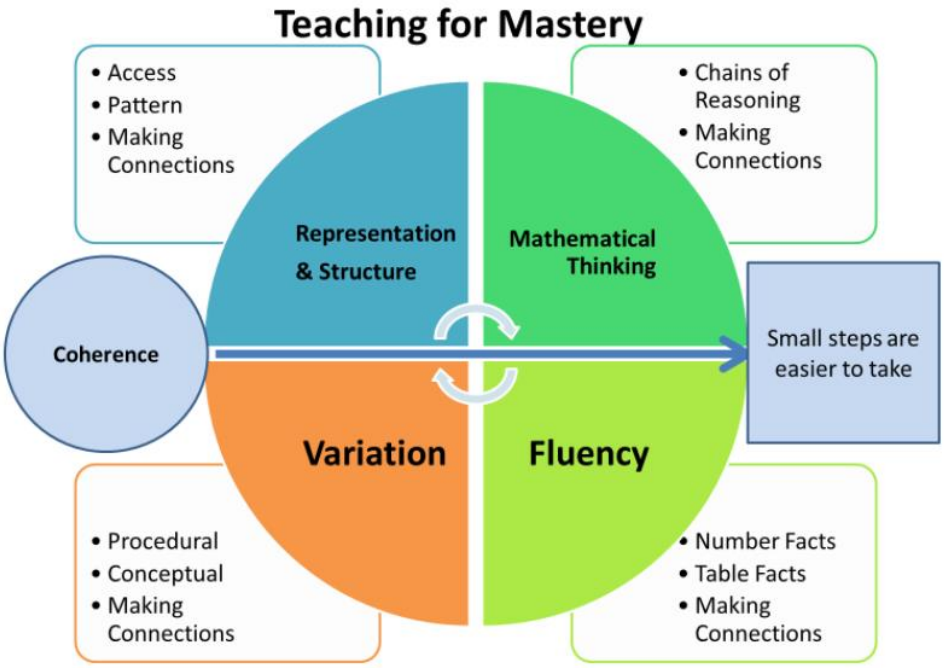
By focussing on these identified drivers and placing them at the heart of our curriculum we believe our children will be ready to successfully meet the challenges of the next stage of their education.

CURRICULUM IMPLEMENTATION

Teaching and Learning

Our maths curriculum is split into year group specific units that are taught in a sequence whereby previous learning can be used to support new learning. The sequence in which the units are taught also supports the teaching of, and the children's ability to create links between different concepts and therefore deepen their understanding.

Each unit is then designed in small, carefully sequenced steps that pupils should aim to master before moving on to the next stage. When designing these small steps, the concepts of mastery underpin the lesson planning to ensure children have a deep conceptual understanding of what is being taught. The objective is explored using a range of representations and structures; fluency is developed as well as the flexibility to move between different contexts; variation is used to develop deep and holistic understanding and children are encouraged to think mathematically throughout.



A typical maths lesson at Redesdale Primary School may begin by activating prior knowledge that children may need to access from their long-term memory to help them to learn the new concept of the day. The lesson will then progress through several small steps to develop understanding of what is being taught. These small steps may introduce the concept using a range of representations, may use conceptual and procedural variation to explore the concept further and will encourage the children to respond in complete sentences using the correct mathematical vocabulary. As we believe that all children can achieve in maths you will not see 'typical differentiation'. Instead, you will see support mechanisms put in place to ensure all children can access the lesson and that challenges are put in place to ensure children can deepen their understanding. This support may come in different forms, additional adults for example, or a range of manipulatives to scaffold understanding.

Number talks are daily maths sessions that last approximately 15 minutes and are aimed at building number sense. Number sense is the ability to play with numbers meaning students can visualise problem solving, perform calculations quickly, and are flexible in their mathematical strategy. These are all skills that we feel are incredibly important in ensuring children are successful in the understanding of mathematics.

Our maths curriculum is organised using the White Rose Maths Scheme of Learning, but staff have also received training on and are encouraged to make use of, the NCETM's spine of Primary Mastery Development Materials to support their continuing professional development and subject knowledge. Throughout the academic year 2021-22, staff have been introduced to the NCETM Curricular Prioritisation documents and we will be transitioning across to these with a view to following them in their entirety by September 2023.

CURRICULUM IMPACT

Assessment

Teaching staff and support staff use a wide range of formative assessment tools during the lesson to judge the impact that the teaching is having on the pupil's learning.

Throughout every maths lesson, staff are constantly checking the learning taking place to identify depth of understanding, misconceptions and how to move learning on. Where prior assessment information has shown that understanding may not be as deep, these ideas are covered further in either small group intervention sessions or through further coverage in number talk.

As well as this, teaching and support staff also judge the success of each individual lesson. Where it is believed that children have not developed a deep understanding of a concept, subsequent lessons will reflect this and / or small group intervention may take place. This is a chance for the children to work in a small group to explore the concept further and address any misconceptions that may have arisen during the lesson. Pre-teach sessions may also be delivered to small groups of children where a concept is introduced to them in preparation for a future session. This approach is designed to allow the children to 'keep up' with their learning rather than having to 'catch up'.

To further measure the impact of maths teaching and learning summative assessments are delivered across Y1-6 at the end of each term. This is a helpful tool to measure how deep the children have learned a concept when it is assessed out of context and later to the initial teacher input. A question level analysis is then completed of these tests to measure this

impact and help inform planning for the next term. Pupils are also grouped based on need and interventions planned.

Monitoring and Evaluation

The Maths Subject Leader monitors samples of children's work produced in math's lessons and across other curricular areas where maths evidence may be gathered. Design Technology booklets, Science, Computing as well as History and Geography, for example.

It is the responsibility of the Subject Leader to monitor the standards of children's work and the quality of the teaching of maths. The Subject Leader is also responsible for supporting colleagues in their teaching, for being informed about current developments in the subject, and for providing a strategic lead and direction for maths across school. The Subject Leader is responsible for informing the Headteacher of the strengths and areas for development in the subject and for identifying ways to make further improvement. The Subject Leader has allocated time for monitoring maths including reviewing samples of children's work and visiting classes to observe a range of teaching opportunities, in addition to speaking to children about their experience of the subject and their involvement in lessons.

Reviewing this Policy

This policy will be reviewed every three years by the Subject Leader, in conjunction with the Headteacher and Governing Body. Any changes made to this policy will be communicated to all members of staff.