Carrington Infant School (Carrington Schools Federation)

Maths Policy

MISSION STATEMENT:
The Carrington Schools Federation: an ambitious, caring, and inclusive community.

VISION:
To be a nurturing community that develops respectful, resilient, and happy children with the self-belief, knowledge, and skills to thrive in the future.

Date Policy last reviewed: October 2025
Signed by:
Head Teacher: Kate Cliffe **Date:**
Chair of Governors: Nadia Zachary **Date:**

Maths - Laura Vilelas

Contents

Date Policy last reviewed: October 2025
Signed by:
Head Teacher: Kate Cliffe **Date:**
Chair of Governors: Nadia Zachary **Date:**

Maths - Laura Vilelas

Introduction

Mathematics is a core subject in the National curriculum. The renewed framework for the New National Curriculum (2014) describes in detail what pupils must learn in each year group, which focuses on developing a greater depth of understanding. This ensures continuity, progression and high expectations for attainment in mathematics.

Subject Intent

'The best way to learn maths is to do maths'

At Carrington Infant School, we will provide a high quality mathematics education that focuses on a 'mastery' approach. We will ensure that all of our children are able to develop mathematical fluency and understanding by introducing concepts using practical equipment and pictorial images.
At the heart of our lessons, children will be engaged in logical reasoning, problem solving and the ability to think in abstract ways; allowing them to develop resilience and a positive and enthusiastic attitude towards maths. Collaborative learning provides opportunities for mathematical talk as a means to promote and enhance learning.

Aims and Outcomes

Mathematics equips pupils with the 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. Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them.

All pupils will:

- 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 which will support them to develop an argument, justification or proof using mathematical language.
- Solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

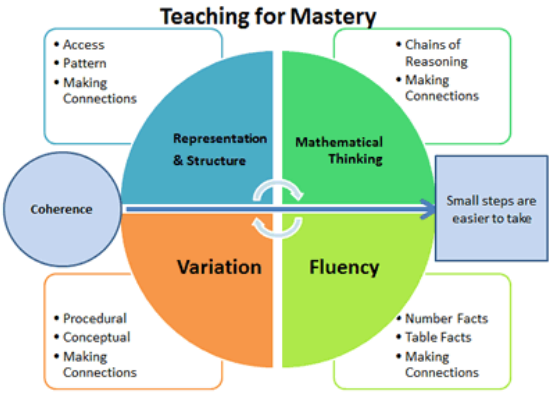
Date Policy last reviewed: October 2025
Signed by:
Head Teacher: Kate Cliffe **Date:**
Chair of Governors: Nadia Zachary **Date:**

Maths - Laura Vilelas

Teaching and Learning

At Carrington Infant School we follow the Teaching for Mastery approach. The Mastery curriculum has been developed to ensure every child can achieve excellence in mathematics. It provides pupils with a deep understanding of the subject through a concrete, pictorial and abstract approach. This ensures pupils fully understand what they are learning and are therefore able to apply this to different contexts.

As part of the BBO Maths Hub Primary Teaching for Mastery programme, we are beginning to implement the Five Big Ideas. This central component, drawn from research evidence, underpins all teaching or mastery.



The key elements of the Five Big Ideas are as follows:

- Opportunities for **Mathematical Thinking** allow children to make chains of reasoning connected with the other areas of their mathematics.
- A focus on **Representation and Structure** ensures concepts are explored using concrete, pictorial and abstract representations, the children actively look for patterns and generalise whilst problem solving.
- **Coherence** is achieved through the planning of small, connected steps to link every question and lesson within a topic.
  Teachers use both procedural and conceptual **Variation** within their lessons and there remains an emphasis on **Fluency** with a relentless focus on number and times table facts.

Curriculum Overview

Early Years Foundation Stage (EYFS)

In EYFS, mathematics is taught through 10-15 minute fluency sessions 4 times a week, carpet activities, enhanced provision, continuous provision and a fortnightly focused activity . Children explore mathematical concepts through active exploration and their everyday play-based learning. Children are taught key concepts and develop number sense using a hands on practical approach. Children are allowed time for exploration and the use of concrete objects helps to support children's mathematical understanding. Mathematics in the early years provides children with a solid foundation that will enable them to develop skills as they progress through their schooling and ensures children are ready for the National Curriculum.
Teachers are using the NCETM Mastering Number programme to deliver their fluency

sessions which covers the number objectives from the White Rose Maths Schemes of Learning for Reception. The programme aims to secure firm foundations in the development of good number sense. It is designed to ensure that pupils develop fluency with, and understanding of, number that is crucial to future success in maths. Teachers also use the White Rose Maths detailed guidance notes, which are aligned with the statutory framework for EYFS, to plan learning oppurtunities.

KS1

In Key Stage 1, teachers continue to embed and develop the mastery approach using the White Rose Schemes of learning

In Year One, Maths is taught through a blend of adult-led sessions and continuous provision, allowing children to explore and apply mathematical concepts in a practical and engaging way. Through carefully planned play projects within the learning environment, children have opportunities to develop their number sense, problem-solving skills, and mathematical language during play. This approach supports a smooth transition from the Early Years and ensures that mathematical learning is meaningful, hands-on, and embedded in everyday experiences.

In Year 2, Maths is taught for 1 hour daily with opportunities for discussion, use of practical resources and visual representations to support learning.

Teachers use the White Rose Maths Schemes of Learning (SOL) to plan lessons, choose suitable resources and help children take small steps to progression. The Schemes of Learning make sure topics are introduced to children in a logical order and revisited throughout the year to encourage deep learning and ensure children have the foundational knowledge they need, before moving on to more advanced maths concepts and tackling more challenging number problems.

The use of high quality materials and tasks to support learning and provide access to mathematics, is integrated into lessons. These may include:

- White Rose Maths Schemes of Learning
- NCETM spine materials
- NRICH problems and investigations
- Visual images
- Concrete resources

The White Rose Maths (WRM) Curriculum focuses on reinforcing number competency, whilst providing opportunities to build reasoning and problem solving into each lesson, and encourages each child to build confidence and resilience to achieve in maths. The mastery approach values real understanding and richer, deeper learning above speed. It sees all children learning the same concept in small, cumulative steps, each finding and mastering challenge at their own level. Those who grasp a concept easily have time to explore and understand that concept at a deeper level.

WRM have produced a progression document that shows how the WRM Curriculum links to the Key Stage 1 and 2 National Curriculum. It provides a clear overview of the whole primary phase so that it is easy to see how key topics are developed over time. Teachers will use the document as a reference for what will be covered in their year

group, as well as seeing what has been taught previously and where the learning will continue next. It also allows teachers to see when topics are taught.

KS1 classes also complete 5-10 minute fluency sessions 4 times a week following the NCETM Mastering Number programme. It aims to secure firm foundations in the development of good number sense for all children from Reception through to Year 2. The aim over time is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number.

Cross Curricular Links

English - During English lessons children will develop their mathematical skills by learning vocabulary and strategies to support the reading and interpretting of mathematical problems. Children will also be able to explain their ideas, methods and present their findings.

Science - Almost every scientific investigation is likely to require some mathematical skills in classifying, counting, measuring, calculating, estimating, and recording in charts, tables or graphs.

Computing – Computing can be used to enhance the teaching of Statistics. Children can use computing programmes to collect and present information.

Art - Children will be exploring patterns, fractions, symmetry, shape and position.

Design and Technology - Through food preparation children will explore measurements, scales and time.

History and Geography - In History and Geography learners may collect data by measuring or counting and record results in the form of charts, tables or graphs. Historical ideas require an understanding of time and time lines similar to the number line. Map skills require the understanding of coordinates, directions, position and scale.

Music - In music children will develop and support their maths learning through sequences, patterns, composition, fractions and time.

Physical Education (PE) - PE gives children the oppurtunity to explore shapes, patterns, co-ordination, position and direction. It also requires an understanding of time.

Forest School - Taking part in sessions in our on site Forest School gives children the oppurtunity to sort and compare natural objects, seek patterns in their surroundings and use their problem solving sillks.

Community Pantry - By taking part in helping our community pantry children have the oppurtunity to sort items into catergories, discuss their weight and take note of their best before date.

Assessment

Assessment is an integral part of teaching and enables staff to meet the needs of all pupils. Teachers use a range of methods in order to monitor and assess pupil progress, including:

- High quality questioning and discussion during lessons
- Working with focus groups of children
- On the spot verbal feedback
- Feedback from LSAs
- Timely marking so effective feedback is given immediately
- Intervention groups – support and challenge
- Regularly updating Sonar
- Half termly assessments

Early Years Foundation Stage

Pupils' progress is continually reviewed by ongoing dialogue between practitioners and next steps are agreed. Children's progress during teacher focused activities is recorded as to whether children are on track or not on track. Those not on track are given next steps to achieve the desired goal. Children's individual progress is recorded on Sonar and our EYFS tracking grid. Progress is discussed half termly at pupil progress meetings with SLT. Any Wow moments that take place are recorded on Tapestry so that parents can view their child's progress.

Key Stage 1

Assessment of pupils' progress against key objectives are essential aspects of the National Curriculum for mathematics. Each September, baseline assessments are completed in each year group.

Teachers make on going assessments in the form of; observations, group work, marking and feedback. Formal assessments are entered on to the schools tracking systems (Sonar) termly.

Informal assessments made by the teacher are ongoing, these should identify developments and misconceptions in learning and enable staff to assess pupils' performance which in turn informs planning.

All work will be marked in line with the schools marking policy.

Resources

A bank of essential mathematics resources, including those that are essential to teaching White Rose Maths, are kept in each classroom. Further resources relating to key units are kept in maths cupboards which are located in the Computing Suite and the Art Room.
The mathematics co-ordinator will be responsible for ordering, maintaining and organising resources.

Roles and Responsibilities

Children's progress will be monitored and evaluated regularly, and evidence of attainment will be recorded, based upon teacher assessment against the criteria of the

new National Curriculum. These evaluations, and data analysis, will be used to inform future planning within the class and year group.
The Maths Governor will regularly visit to monitor and evaluate the Maths curriculum and support children in their learning of mathematics. The Maths Governor will report back to the governing body through the teaching and learning committee.
Parents will be informed of their child's progress in mathematics during parent consultation evenings in the autumn term, spring term and the end of year report.

Inclusion

In line with the school's inclusion policy, daily maths lessons will be inclusive of all children. Where required, pupils will have work planned to meet their specific needs. This may involve further differentiation, individual teaching from a teacher or learning support assistant and intervention groups. Pupils will access this curriculum at the appropriate level, ensuring progress and adaptations.

Links to other Policies

Assessment

Behaviour

SEND

Monitoring and Review

The class teachers, mathematics lead, Head teacher and the Maths Governor will monitor the approaches detailed in this policy, in line with school policy and assessment procedures.

Date Policy last reviewed: October 2025
Signed by:
Head Teacher: Kate Cliffe **Date:**
Chair of Governors: Nadia Zachary **Date:**