



# Rossmore School

## Rossmore School's Maths policy

### Intent

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.

At Rossmore, children are encouraged to enjoy Mathematics and become positive and enthusiastic mathematicians by developing their skills, knowledge and understanding through practical experiences which have relevance and purpose in everyday situations. It is important that children develop the skills of numeracy to become lifelong learners. They should be able to apply these skills in different situations across the curriculum and in daily living outside school.

The National Curriculum Programme of Study for mathematics describes in detail what pupils must learn in each year group. Combined with the Rossmore School's Calculation Policy, this ensures continuity and progression and high expectations for attainment in mathematics.

We aim to provide the pupils with a mathematics curriculum and high-quality teaching to produce individuals who are numerate, creative, independent, inquisitive, enquiring and confident. We also aim to provide a stimulating environment and adequate resources so that pupils can develop their mathematical skills to the full.

### Implementation

The National Curriculum (September 2014) is the basis for implementing the statutory requirements for Mathematics. The expectation is that the majority of pupils will move through the year group Learning Objectives at the same pace. Decisions about when to progress should always be based on the security of children's understanding and their readiness to progress to the next stage. It is vital that a positive attitude towards mathematics is encouraged amongst all of our pupils in order to foster confidence and achievement in a skill that is essential in our society.

At Rossmore School, we use the White Rose Long Term and small steps planning and NCETM resources to support the National Curriculum. We teach using a Mastery approach with high expectations of all children and the expectation that most children will continue to learn at the same place. We are committed to ensuring that all pupils have opportunities to master the key concepts of mathematics, appropriate for their age group, so that they make genuine progress and avoid gaps in their understanding that provide barriers to learning as they move through education. We also put the CPA approach at the centre of our Mathematics teaching. This approach will ensure that the children have fully understood all concepts and then can move on to the problem solving and reasoning aspects of maths. Pupils who grasp concepts rapidly will be challenged through being offered mastery problems before being taught any new content. Those who are not sufficiently confident will consolidate their understanding through additional practice before moving on. As we put the CPA approach at the centre of our Mathematics curriculum, resources are key to the

children's success. These can be solid or paper resources. Basic mathematical resources are kept within each classroom for free access and are used as much as possible by all children. Children have the opportunity to decide whether or not to use manipulatives during each lesson and they use these resources to show their mathematical understanding in a number of different ways.

We recognise the importance of establishing a secure foundation in mental calculation and recall of number facts using concrete resources before standard written methods are introduced. It is also vital that children are shown a clear link between different methods to ensure depth and understanding. We use accurate mathematical vocabulary in our teaching as well as our modelling and children are expected to use it in their verbal and written explanations.

To provide adequate time for developing mathematics, maths is taught daily and discretely. However, we also provide opportunities for mathematical skills to be taught across a range of subject where appropriate, e.g. there should be regular, carefully planned opportunities for measuring in science and technology, for the consideration of properties of shape and geometric patterns in technology and art, and for the collection and presentation of data in history and geography such as the use of timelines.

The teaching of multiplication facts should be planned as a series of lessons and consolidation should be part of the daily Maths lesson thereafter across all areas of Maths. Children should understand the multiplication facts and related division facts completely – using them in lots of different contexts and exploring their patterns with different resources. We use a range of methods to teach children the patterns and relationships between the times tables as well as using Times Table Rockstars to support children in practising and consolidating learning.

## **EYFS**

During the children's first year of primary school, our aim is for all pupils to cover a broad curriculum that leads towards achieving the national expectations as described in the Early Learning Goals. We recognise that some children will be ready to embark upon the National Curriculum during their time in Reception. We need to be aware of this and ensure that such children undertake work that is appropriate to their ability by teaching each concept in depth which will allow the children to show off their skills in a range of ways. Like the rest of the school, EYFS follow the mastery approach and believe that all pupils are capable to achieve anything.

## **Impact**

The impact of our Maths curriculum is that at the end of Key Stage 2 our pupils achieve and make progress in line with other pupils nationally, evident through:

- Fluency in their recall of key number facts and procedures
- Accuracy in the formal calculation methods for all four operations
- The flexibility and fluidity to move between different contexts and representations of mathematics.
- The ability to recognise relationships and make connections in mathematics
- The confidence and resilience to reason mathematically and solve a range of problems.

## Assessment

Teachers use Balance to keep progress records of all pupils. These records are an assessment of learning during each lesson and will identify the gaps in children's learning. Balance also provides opportunity to see how each child is progressing within each objective so that teachers can plan their next steps. We use our formative assessments each lesson to identify children who haven't fully understood the objective of that lesson, and plan purposeful interventions for the following day. Teaching staff monitor their pupils through observation, discussion, teacher assessment, marking work and testing. Self and peer assessment are used daily to ensure pupils are aware of their own level of understanding.

Pupil progress meetings are held with the Assessment Lead twice a year with class teachers where attainment and progress of each class is discussed and additional needs are identified.

The teaching of Mathematics is monitored through:

- Lesson observations
- Learning walks
- Scrutiny of work
- In-school moderation
- Tracking children's progress on Balance

The co-ordination and planning of the Mathematics curriculum is the responsibility of the Mathematics Team. This team will endeavour to support colleagues in their teaching by keeping them informed about current developments in Mathematics and providing a strategic lead and direction for this subject.

## Equal Opportunities and Inclusion

Children with additional needs are supported by using practical resources and differentiated activities where needed. They are also further supported by additional support staff whenever possible. Where applicable, children's provision maps will incorporate suitable objectives from the National Curriculum or the EYFS curriculum and teachers keep these objectives in mind when planning work. In addition to quality first teaching, interventions also take place during the afternoons and focus on those children who may need more specific targeted input.

Date reviewed: September 2024

Next Review: September 2026