

Escrick C of E Primary School



Maths Policy

We are a Rights Respecting School and this policy relates particularly, but not exclusively, to the following Articles: Article 12: Every child has the right to have a say in all matters affecting them, and to have their views taken seriously. Article 13: Every child must be free to say what they think and to seek and receive all kinds of information, as long as it is within the law. Article 17: Every child has the right to reliable information from the media. This should be information that children can understand. Governments must help protect children from materials that could harm them. Article 28: Every child has the right to an education. Primary education must be free. Secondary education must be available for every child. Discipline in schools must respect children's dignity. Richer countries must help poorer countries achieve this. Article 29: Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment

Maths Intent

We aim to promote a positive approach to mathematical concepts and procedures which are taught sequentially in coherent, small steps. Our planning is underpinned by the principles of a mastery approach with an aim to achieve depth of knowledge for all, thus providing a platform which will give every pupil the opportunity to become fluent in basic skills and to be able to reason with and solve a variety of problems in real-life contexts and across the curriculum. Pupils who grasp concepts quickly are further challenged.

We want all children to be able to see mathematics as an interconnected subject and be able to make connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. We want our children to apply their mathematical knowledge to other subjects.

Maths Planning and Implementation

In line with the National Curriculum, children are taught to become **fluent** in the fundamentals of mathematics (including calculation strategies); **reason** mathematically using **mathematical language** and apply their knowledge and understanding to **problem solving** tasks.

Our Maths curriculum is based on our own bespoke long-term plan, which builds coherently and makes links to other subjects. This document also highlights the basic skills that we feel children should be taught to ensure all children are able to access the curriculum.

Teachers predominantly follow the NCETM spines across school, which are supplemented with resources from White Rose Maths where needed. Both schemes support Teaching for Mastery and support teachers with the planning of Maths lessons by incorporating fluency, reasoning and problem solving.

Children who grasp concepts rapidly are challenged through being offered rich and sophisticated problems. Those who are not sufficiently fluent with material should consolidate their understanding, including through additional practice, before moving on and/or revisit later. All children revisit identified 'basic' Maths skills and other concepts regularly throughout the school year.

Maths Teaching at Escrick CofE Primary has CPA at its core

Concrete - Providing children with objects and resources to manipulate in order to demonstrate their mathematical thinking.

Pictorial - Providing opportunities for children to represent their mathematical thinking through diagrams, images, drawings or models.

Abstract – Providing opportunities for children to become more familiar with formal mathematical representations including signs, symbols and digits.

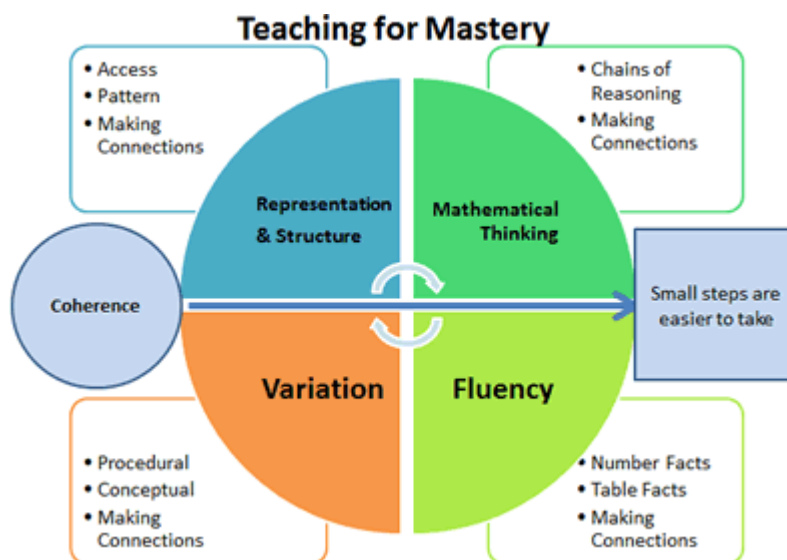
Our calculations policy outlines the above for + - x and /

Maths Mastery at Escrick CofE Primary:

Much of the NCETM and White Rose Maths planning and resources are based on the five big ideas underpinning teaching for mastery:

Five Big Ideas in Teaching for Mastery

A central component in the NCETM to develop Mastery Specialists has been discussion of Five Big Ideas, drawn from research evidence, underpinning teaching for mastery. This is the diagram used to help bind these ideas together:



Coherence: Connecting new ideas to concepts that have already been understood, and ensuring that, once understood and mastered, new ideas are used again in next steps of learning, all steps being small steps

Representation and Structure: Representations used in lessons expose the mathematical structure being taught, the aim being that students can do the Maths without recourse to the representation.

Mathematical Thinking: If taught ideas are to be understood deeply, they must not merely be passively received but must be worked on by the student: thought about, reasoned with and discussed with others.

Fluency: Quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics.

Variation: Varying the way a concept is initially presented to students, by giving examples that display a concept as well as those that don't display it. Also, carefully varying practice questions so that mechanical repetition is avoided, and thinking is encouraged.

Our Maths Provision

Maths skills are taught daily in discrete lessons, and in regular short, additional sessions to consolidate and revisit content, through small group interventions, through active Maths sessions and across the curriculum in various subjects.

Additional fluency activities are created and resourced from various outlets online in EYFS and KS1, and KS2 classes also use Target Maths textbooks.

We endeavor to include contexts unfamiliar to our children through our Maths teaching to broaden their views and understanding of the world we live in, i.e. multicultural names, public transport, use of money.

In order to support the delivery of Maths lessons to all pupils, the school has a range of resources available. Within the classroom, Maths representations are available to children at all times; these include basic resources such as number lines, 100 squares, rulers, counters, numicon, etc. Key Stage 1 has a broader range of representations to ensure children express their mathematical place value and number knowledge in a wide range of contexts such as part whole models, bar models, number tracks, unifix cubes and tens frames. These resources are also available in provision in Reception and Year 1 classes. Other specific resources (eg. balance scales, metre-rulers) are stored in our resource cupboards.

Across the school (Year 1-6), the children have access to the online platforms Numbots and Times Tables Rock Stars, which the children use at home and at school, to reinforce their fluency and understanding of number composition and times tables.

Within the daily Maths lesson, teachers provide activities to support children who find mathematics difficult. Children with SEND are taught within the daily mathematics lesson and are able to take part at their level through the support of a teacher, teaching assistant and/or through appropriate activities and resources. Where applicable children's EHCPs incorporate suitable objectives from the planning documents.

Intervention groups take place at times throughout the year, in order to give further support to children working below national expectations.

All children at our school have an equal entitlement to access the Maths curriculum and make progress in order to attain the best they can in the subject.

Assessment and Reporting

We assess maths rigorously, both formatively and summatively. Teachers pre and post assess each pupils' attainment and progress in Maths daily. We gather evidence by observing children at work, discussing their work with them, marking independent work they produce and administering NFER tests (twice per year) in Y1 upwards and previous SATS papers in Y2 and Y6. Early Years pupil progress is recorded through Tapestry and a class maths record book. The class teacher then uses both resources alongside the Development Matters Framework to inform teacher judgement to assess the children. Parents are reported to formally through twice yearly parents' evenings and a yearly written report.

Teachers inform parents on a termly newsletter about which Maths units are being covered.

Marking of Maths work is in line with our Marking and Feedback Policy.

The role of the Maths Subject Leader:

- Provide leadership and direction for the subject.
- Attend relevant professional development courses and disseminate relevant information to Key Stage teams.
- Play a key role in supporting, and providing resources for, teachers in the subject, in relevant Key Stages.
- Evaluate the effectiveness of teaching and learning, the subject curriculum and progress towards pupils meeting year group standards through regular monitoring.
- Set yearly targets through a detailed action plan and monitor progress towards these targets.
- Work with our SENDCO and SLT to identify children needing support and/or challenge.

The Maths Subject Leader will carry out book scrutinies and learning visits, monitor data and deliver staff meetings/lead phase meetings, as appropriate. The Maths Subject Leader will ensure this policy is kept up to date.

Updated: March 2025

To be reviewed: March 2027