Mathematics Intent

At Rushey Mead Primary School we aim to offer a broad-based curriculum to all pupils. This will support pupils in gaining a positive and confident attitude to mathematics: as a fascinating, practical and powerful subject. Children will be mathematically fluent, to master Maths, without resorting to rote learning. New mathematical concepts are introduced using a 'Concrete, Pictorial and Abstract' approach; enabling all children to experience hands-on learning when discovering new mathematical topics and allows them to have clear models and images to aid their understanding.

Our curriculum will encourage pupils to recognise the application of mathematics in a wide variety of everyday situations and develop their analytical skills whilst nurturing a spirit of enquiry.

We aim to develop oral and written communication skills within the subject that contribute to other areas of the curriculum where mathematics skills may be relevant.

Ongoing staff CPD ensures that teaching methods and resources will allow all children to have equal access to mathematics and to experience success and enjoyment in the subject in order to achieve their full mathematical potential.

Mathematic Implementation

Basic Maths lessons are taught daily and follow the National Curriculum Mathematics programmes of study which prioritises that children should:

- 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 non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

The school teaches the Primary Framework, using the Maths - No Problem! Themes are revisited at various intervals throughout Reception, Key Stages 1and 2, to ensure consolidation and progression outlined on the long-term plan. In all year groups teachers supplement these resources with appropriate materials from a range of sources.
The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace in mixed ability whole class lessons. However, decisions about when to progress are based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly are challenged through being offered rich and sophisticated problems. Those who are not sufficiently fluent with earlier materials will consolidate their understanding, including through additional practice in differentiated small groups, before moving on.

A typical Maths lesson in Years 1 to 6 follows this structure:

- **Explore** is an anchor task based on a real-life problem which gives pupils the opportunity to interact with and learn from one another. Calculations/jottings are recorded in a Maths Journal
- **Guided Practice** lets the pupils solve problems using a number of different methods they may not have previously known which are recorded in a Maths Journal
- **Independent Practice** is the final part of the lesson where children complete the workbook individually.
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Revise and Review consolidation lessons are used to revisit previous learning and ensure Maths skills are embedded.

Times Table Rock Stars (TTRS) is a maths programme used in KS2 that supplements the of learning times tables and has a proven track record of boosting children's fluency and recall in multiplication and division. Numbots is a maths programme used in KS1 to reinforce addition and subtraction. Certificates are awarded to celebrate improvements.

Mathematics Impact.

At a result of our Maths teaching at Rushey Mead Primary School you will see pupils working towards a mastery of Maths using 'Concrete, Pictorial and Abstract' resources. Children are developing skills in being articulate and are able to reason verbally, pictorially and in written form. Children understand the importance of Maths and show confidence in believing that they will achieve and are keen to attempt a range of problems and demonstrating flexibility and fluidity to move between different contexts and representations of Maths.

Our Maths evidence of learning is of a high standard of which children clearly take pride; the range of activities demonstrate good coverage of a broad and balanced curriculum. Long term plans are based on the Maths- No problem! Curriculum themes enabling children to get to grips with different areas of maths through extended periods of time. The Maths subject lead has an ongong knowledge of where each year group is currently on their long term plan and books are moderated both internally and externally on a regular basis to validate teacher judgements. Maths evidence is triangulated using coaching observations, data and book scrutiny's which are discussed with teachers during their pupil progress meetings.

Assessment informs the teaching and learning sequence. Formative assessment within every lesson helps teachers to identify the children who need more support to achieve the intended outcome or those requiring challenge to extend their reasoning. In order to support teacher judgments, Summative assessments, Revise and Review consolidation lessons from the Maths- No problem! scheme is used to check that learning is embedded and PUMA tests are completed each term and are reported to parents.