Rose Green Infant School
Intent, Implementation and Impact Statement
Mathematics

Intent

We aim to provide a fun, relevant and challenging mathematics curriculum where all children develop mathematical fluency, reasoning and a love of number. We believe mathematical success is possible for all and we strive for all children to become fluent in the fundamentals of maths, developing their conceptual understanding and the ability to apply knowledge rapidly and accurately. We encourage children to develop their speaking and listening skills through their use of mathematical language including reasoning and explanations. We want children to be able to justify, make links to known facts and solve problems with confidence and think of mistakes as learning opportunities. As mathematics is such an important life skill, we strive to equip our children with the skills necessary for life outside the classroom. We use real life situations in order to develop the children's problem solving capabilities and the children understand the value and relevance of mathematics through the links to other areas of our creative curriculum.

Implementation

In the **Foundation Stage,** our young mathematicians are provided with many exciting opportunities, through planned purposeful play and a mix of adult-led and child-initiated activities, to develop and improve their skills in counting, understanding and using **numbers,** calculating simple **addition** and **subtraction problems;** and to describe **shapes, spaces,** and **measure.** We use the NECTM 'Mastering Number' materials to structure our daily inputs to ensure continuity and progression through the year. Emphasis is placed on practical activities and informal recording, working towards a more formal recording. Children are given opportunities to work through a variety of planned practical experiences that develop mathematical understanding, language and skills. Children use a wide range of practical resources to gain the deeper understanding of a concept learning through play wherever possible.

In Key Stage 1 we follow the 'Small Steps' of the White Rose Maths scheme of work as the basis of our planning, which we supplement with materials from other schemes such as Numicon online and we are beginning to use the NCETM resources to teach a broad and challenging curriculum. The children

use a range of concrete and pictorial methods alongside abstract forms. Children continue to develop the ability to explain their reasoning (this is recorded by an adult or by the child themselves, depending on their age and stage). Lesson activities are adapted and **scaffolded** to suit different **abilities** and **learning styles.** Mathematics lessons allow for collaborative learning and thus encourage children to talk in pairs, small groups or through class discussion, to share learning. For those children who grasp concepts rapidly, they are challenged through a range of problems, whilst those not sufficiently fluent will be provided with opportunities to consolidate their understanding through additional practice and first response intervention.

From September 2023 our teachers have introduced the NCETM 'Mastering Number' materials. Children in Year 1 and Year 2 have a daily teacher-led session of 10-15 minutes on top of their timetabled maths lessons. This programme develops solid number sense, including fluency and flexibility with number facts, which will have a lasting impact on future learning for all children. The Mastering Number programme is wholly consistent with teaching for mastery. As a school we are also taking part in a 'Mastery Readiness' course supported by the Sussex Maths Hub. This will support the school in ensuring the very best mathematic pedagogy for our children and it will ensure all of the staff have a good understanding of what teaching for mastery in mathematics means which will in turn support all of our children to be the best mathematicians they can be.

Impact

Our children have a positive view of maths due to learning in an environment where maths is promoted as being an exciting and enjoyable subject in which they can investigate and ask questions; they know that it is okay to make mistakes because this can strengthen their learning through the journey to finding an answer. Children are confident to 'have a go' and choose the equipment they need to help them to learn along with the strategies they think are best suited to each problem. Children understand how mathematics links to their everyday lives and the world around them. As each unit of work is covered, we consider the related intended learning, recognise children who are working at or beyond the expected level for Key Stage 1, as well as identifying the children who need and who will therefore receive support. Children in the Foundation Stage are assessed against the Early Years Learning Goals at the end of their reception Year and at the end of Year 2, children are assessed to enable teachers to inform Year 3 teachers and parents about next

steps and support needed for individual children's learning journey in Mathematics. Mathematics monitoring includes work scrutinies, lesson observations and/or learning walks, pupil voice interviews/questionnaires in order to ascertain correct curriculum coverage, the quality of teaching and learning as well as the children's attitudes to and retention of maths learning. This information is then used to inform further curriculum developments and provision is adapted accordingly.