



Maths at RNSF

Intent

At RNSF our aim is for children to be confident to 'play' with numbers, to become critical thinkers and independent problem solvers. Mathematics is part of our everyday lives, and we believe it is essential to engage children in a curriculum where they absorb new skills, make connections and solve mathematical problems independently. We **inspire** the children with a hands-on approach to mathematics in which children are given varied opportunities to **explore** and make connections with real life situations. Every day children practise their fluency in a mathematical context through recalling information, identifying numbers and describing patterns. They learn to recall number facts, make predictions, interpret data and become confident when explaining about their reasoning. They **discover** problems, analyse data, evaluate their findings, **create** their own mathematical mysteries and **flourish** in a wealth of rich mathematical opportunities.

Implementation

Our Maths curriculum provides breadth and balance, is relevant and engaging and is differentiated to match the needs and abilities of all our children to ensure that all pupils are challenged. As a school, we believe in the importance of following the concrete-pictorial- abstract approach as a means to developing a solid understanding of mathematical concepts which can be applied in a variety of contexts through reasoning and problem-solving challenges.

From EYFS to Year 4, we adhere to our calculation policy which outlines the progression of strategies and methods to be taught. From EYFS to Year 4, children follow the scheme of 'White Rose' which supports children in learning the fundamentals behind the meanings of numbers and exploring other key mathematical areas. This scheme is based on the National Curriculum. Our maths curriculum is also supported through the implementation of other resources such as Numbersense, NCTEM and NRICH, where a teacher sees it necessary to support or challenge to meet an individual need but for a class, coverage is maintained. Teachers plan their lessons following the White Rose small steps but sometimes adapt the scheme in order to suit and benefit the needs of our children so that connections between units of learning are easier to recognise.

Progression documents are followed using the White Rose Scheme and recap lessons are given at the beginning of each new unit to ensure there are links to previous learning. Teachers assess daily through live and verbal feedback. Termly White Rose assessments (y1-4), are used as a diagnostic tool to ensure that teachers are adapting learning to meet the needs of all children and ensure that any necessary interventions are targeted specifically to meet the needs of children. In addition, end-of-unit assessments are used to ensure any gaps are picked up on for quick interventions. Pupil Progress meetings ensure the Maths Coordinator has a clear picture of maths across the school and children's achievements.

Times tables play an important part in our maths learning, with children developing their fluency in rapid recall of tables up to 12×12 by the end of year 4. Whilst the rapid recall of times tables is being developed, children are also learning how to apply and manipulate their understanding of this to reason and solve problems. Children from Y2 – Y4 have the opportunity to consolidate and apply their times tables knowledge at home using their TT Rockstar accounts.

Impact

By the end of Year 4, every mathematician will have developed a bank of efficient and accurate skills that can be used to calculate effectively. These will have been underpinned by the C-P-A process so children understand rather than just do, which ultimately will allow children to identify when answers do not make mathematical sense. Children will be able to apply these calculation skills and understanding of other areas to become confident and resilient problem-solvers with the ability to reason and articulate their ideas mathematically.

We know that, during school closures, some pupils will have fallen behind their peers, so we have embraced the WRM recovery curriculum and accompanying resources from Y1 – Y4. These are designed to enable us to support all our pupils as they return to school. These materials and resources are intended to ensure that we, as teachers, have the knowledge and confidence to give our pupils the best possible start to learning maths in the new school year. We are using these 'Ready to Progress' White Rose maths materials in unison with the DFE Mathematics guidance. We are identifying gaps through our ongoing summative and formative assessment and are building in opportunities to fill these gaps for every child.

Impact can be evidenced through pupil voice. Children can articulate the context in which maths is being taught and relate it to real life purposes. Children will master mathematical concepts and skills and be able to show it in multiple ways, using mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations. Pupils will be using mathematical vocabulary independently and using it in a wide range of situations in and outside of their classrooms.
