



We always try to be that little bit better

Introduction

All pupils can achieve in mathematics! Becoming fluent, being able to reason and having the skills to problem-solve ensures that our children have the knowledge to successfully engage with ever-changing real world scenarios. Mathematics can lead to success in many areas of society and as a school we are committed to inspiring children's future ambitions in these areas. Alongside cultivating a positive and enthusiastic mindset towards mathematics, we want children to feel confident and well-equipped to tackle challenges and to be able to select which mathematical approach is most effective.

Intent

Recently, our maths curriculum has been updated and modified to suit the needs of our children more specifically. Our maths curriculum throughout school is built around the White Rose Schemes of Learning. We strongly believe that their ordering of learning blocks and the specificity of small steps within each unit, positively builds children's confidence within each objective. The scheme is broken into the following:

Learning blocks

Learning blocks are set out across the year so that there is full curriculum coverage. They are sequenced so that objectives can be built upon across the year starting with simpler tasks before accessing blocks that are more challenging.

Small steps

Small steps break down the learning blocks into more manageable sections. Each step builds carefully from the previous step, building on pupils' prior knowledge to develop new skills.

Main Lesson

During a main maths lesson teachers and children will 'get ready' and begin each session with an assessment for learning task. This is then followed by a series of teaching slides that include a 'back and forth' approach between pupil and teacher. Children are provided with a constant CPA approach targeted for their level and understanding.

Children are then given opportunities to show their learning through fluency, reasoning and problem solving questions independently. Children, who need support, can access it through manipulatives and adult help. Equally, challenges to extend children's knowledge will also be available.

White Rose offers a fantastic spine throughout the maths curriculum however it may need further tailoring for each of our cohorts to ensure the specific needs of each child are met. Staff ensure that each lesson is adjusted where necessary through the use of assessment for learning.

Maths Meeting

Maths meetings are non-negotiable sessions within our school. These sessions support areas of the curriculum where pupils may need a quick 'memory jog' before consolidating skills. They are broken down into 'small chunks' across the day or one 'bigger 'chunk'.

Children are given the opportunity to practise and consolidate key objectives within the curriculum. No new learning is taught during a session. Children in maths meetings may use whiteboards, verbal discussions, chants and low stakes quizzes for support. Low stakes quizzes highlight any misconceptions, and this can be quickly acted on in the lesson or addressed with further intervention.

SEN

SEND children in our school are fully supported in their learning across the mathematics curriculum:

- Maths meetings are used to identify gaps in learning and are acted upon with further intervention from support staff.
- Children who experience significant difficulties in their maths learning are provided with specific, long-term interventions from support staff. Currently, this includes the power of 2.

- Class teachers are adept in offering support in the classroom where needed, with children selected for small-group work and short, sharp 1:1 interventions identified through live marking.
- Children with an EHCP have direct access to 1:1 support during maths learning; this may be in class, or separately.

Our curriculum is designed to remove any learning ceilings from children who show promise in any aspect of mathematics. Open-ended challenges are used so children can explore problems in greater detail by applying appropriate methods and representing their calculations in a variety of ways. Children may even create their own problems for their peers to solve.

Greater Depth

Children who are mastering the curriculum at a high level may be considered for greater depth. They will be showcasing: consistent high level reasoning skills, conjectures, complex problem solving skills and high speed fact recall. During lessons all children will have access to these materials if deemed appropriate.

Implementation

Planning

Main maths lesson

Long term: We follow the White Rose long term maths overview.

Medium term: Units are broken down into specific areas of maths with each 'small step' being identified and built upon in each lesson.

Short term: Lessons objectives are provided by White Rose in sequential steps along with slides relating to each objective. Teachers adapt lessons further at this stage to suit the needs of their cohort.

Maths meeting

We use the local authority's overview of 'place value, counting, fact recall and calculation (SPCFC)' objectives. This is adapted and tailored to the specific needs of our children. It also enables us to map out crucial objectives.

Learning environment

We believe that having a maths working wall that can aid children's understanding of topics is vital. Maths working walls are present in all classrooms showcasing recently taught methods, challenge extensions and key vocabulary linked with current objectives.

We also celebrate the achievements of children completing Times Table Rockstars and Numbots milestones: this is displayed in the shared areas.

Marking

Please see Marking and Feedback Policy for more information.

Home learning

Homework should not impact teacher workload and should provide an opportunity for children to practise basic skills as well as times tables.

KS1

- Weekly Numbots sessions targeting times tables which children are learning.

KS2

- Weekly TTRockstars sessions targeting times tables which children are learning in class. This could be in the form of individual sessions or a class v class tournament.
- Fortnightly arithmetic questions.

Teaching

Through their secure understanding of key stage expectations and an effective combination of formative and summative assessment, all teachers know where their children are and understand where they need to be. They also plan effectively for how they are going to get them there, through the use of CPA strategies and high expectations for all.

Impact

We measure our impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes through pupil progress meetings.
- Termly summative assessments.
- Low-stakes quizzes.
- End of block assessments
- Children's ability to recall facts and procedures through online platforms.
- Moderating our books both internally and externally.
- Pupil Voice

Assessments

At the end of each term a summative assessment, focusing on skills and knowledge taught up until that point, is used to identify gaps in children's understanding.

Assessments, however, underpin daily maths teaching and are a constant mechanism to help our children. Assessment for learning strategies that are used during maths lessons enables misconceptions to be addressed and interventions to be plotted accordingly.