



Intent- we aim to:

Become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

Be able to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.

Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.

Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics.



Implementation- how do we achieve our aims?

Core Concepts

Subject Delivery

From EYFS- Year 6, maths is taught daily in school. In EYFS the children receive whole class input from the class teacher as well as focused activities throughout the week. There is also an opportunity to access maths-based activities through continuous provision. Across the school, in addition to the hours' maths lesson, children access 'Early Morning Maths' where previous learning is recapped and consolidated: usually at the start of the school day.

Curriculum Resources

We follow the White Rose Maths sequencing and schemes of work. All classes follow the suggested sequencing set out by the maths hub, although the time spent on each unit may vary due to the needs of the individual cohort. Although the majority of our resources are taken from the White Rose Maths scheme of work, we supplement this scheme from: Twinkl (Diving into Mastery); Ten Ticks; Classroom Secrets and My Maths. All these resources have been selected due to their alignment with the White Rose Maths scheme.

Classroom Resources

School has a central stock of concrete manipulatives as well as other resources to support the delivery of the mathematics curriculum. All classes will soon have their own age-appropriate stock of concrete resources.



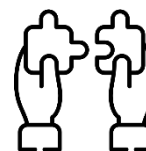
Fluency

Fluency, reasoning, and problem solving are integral aspects of our maths curriculum. We want ALL children to be able to recall key facts rapidly and with confidence; reason mathematically using proof and justification and solve problems with increasing complexity.



Reasoning

Teachers integrate these three concepts into their maths lessons where they see fit. Some lessons may focus on varied fluency with an application activity as a follow up.



Problem Solving

Problem solving is to be made accessible to all children, not just those who are competent mathematicians. Teachers use a range of resources to integrate problems as the focus of the lesson where appropriate.

Assessment and Feedback

Summative assessment takes place in maths termly (end of Phase 1, 3 and 5). We use NFER progress tests in conjunction with formative assessment to make a secure judgement of a child's progress. We track each of the White Rose Maths 'small steps' using our school judgements of: WTS, EXS and GDS. The subject lead regularly meets with class teachers to review progress and set new targets

Marking in maths should primarily be done 'on the spot' and with the child, the children should be encouraged to mark their own work. Although written comments in maths are not always effective, staff mark all work with a tick for a correct answer and a dot for an incorrect answer. Children are then given time (either the same day or the next day) to make their corrections. Verbal feedback and reactive interventions should happen daily where necessary.

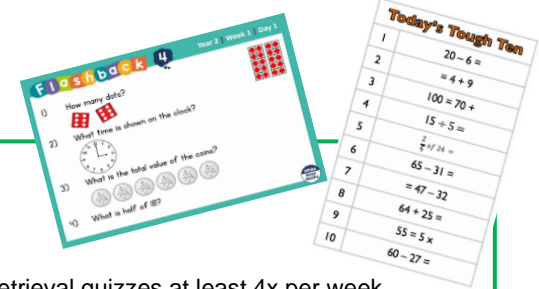
Inclusion

We actively support those children with SEND to reach their full potential in mathematics and have a highly trained staff team who know their children's needs inside out. Our teaching of mathematics is systematic and progressive; children broadly move through the curriculum content at the same pace- this allows for children struggling to grasp new concepts (SEND or not) time to practise, apply and consolidate learning. Despite having a good understanding of the barriers certain children may face with maths (ASD/Dyscalculia/Dysgraphia) staff have high expectations for all children. We have recently embedded a new visual calculation policy that focuses on consistency of representation and language used by all staff, which, in time, will allow for more effective transition across year groups. Our main priority for raising attainment and progress for those children with SEND is first quality teaching; however, we also use reactive, same day interventions (in class) to support children where needed. All support staff (including those supporting children with SEND) have recently received training on our chosen maths intervention- Number Stacks, in addition to CPD on our newly implemented VCP.

Retrieval

Every class, from Year 1- Year 6 completes retrieval quizzes at least 4x per week. Teachers will accompany this retrieval quiz with modelling of focus questions or by providing clues, earlier on in the week.

We have selected the 'Tough Ten', 'Flashback 4' resources and teachers follow these with fidelity, as progression is built into each scheme.



Times Tables

Times tables are introduced to the children from Year 1, where counting in 2s, 5s and 10s starts. In Y2 we expect all children to know their 2, 5 and 10x tables and related division facts. In Y3, we expect the children to know their 3, 4, 8 times tables, with Y4 teaching the 6, 7, 9, 11 and 12 x table.

We use a range of resources to support the children in learning their times tables, including:

- Story and songs from Number Fun (Table Troopers)
- Chanting times tables, memory games.
- Online games such as 'Hit the Button'.

To support the children in learning their multiplication tables, we use TTRS both in school and at home. Teachers ensure that all children have been set the relevant table that they are currently working on.

Precision teaching is used to support individual children (often SEND) on a 1:1 basis for those children who have struggled to meet previous expectations.

The above times tables represent the minimum expectation that we have of the children. Children are encouraged to work through their times tables at a quicker pace, should they be able to.