



Maths Curriculum Statement

Intent

At Streethay Primary School, we **nurture** and **inspire** mathematically thinking children, **preparing** them to thrive in a mathematical world with confidence, resilience and independence. Our ambitious, progressive and interconnected curriculum strives for **all learners** to succeed and make progress from their starting points. I intend for children to achieve maths mastery by having:

An understanding of important concepts

Through excellent modelling and a well-thought out teaching journey, teachers support children in gaining the knowledge required to understand key, important concepts that underpin maths learning. With smaller steps identified for SEND learners.

We intend to create a vocabulary rich environment, where talk for maths is a key learning tool for all children. Pre-teaching key vocabulary is a driver for pupil understanding and develops the confidence of pupils to explain mathematically.

The ability to make connections

All children will have opportunities to identify patterns or connections in their maths; they can use this to predict and reason, and to also develop their own patterns or links within and across maths topics, or other subject areas.

The ability to use, apply and problem solve

We intend that all children are given opportunities to use and apply knowledge and skills gained, regardless of ability. All pupils should solve problems by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

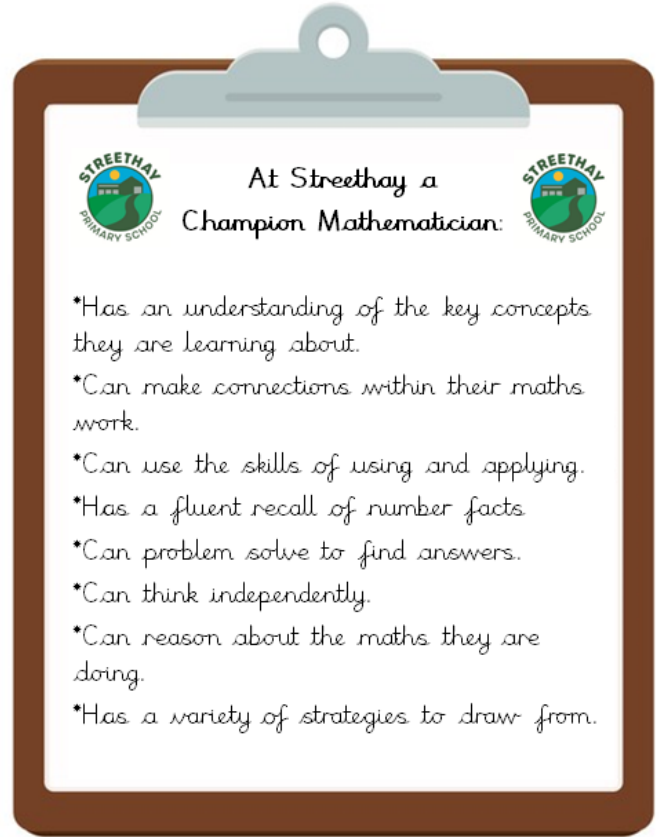
A fluent recall of number facts

We intend for all pupils to 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.

The ability to reason and generalise.

We intend for all pupils to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.

Most importantly to us at Streethay, we intend for **all** children to have a love and passion for the subject of mathematics.



Implement

Our ambitious, progressive and interconnected maths curriculum is implemented in a way which inspires children to explore, question and challenge mathematical ideas together. In our maths lessons, children are encouraged to be curious and to think deeply about the mathematical concepts they encounter.

All children are encouraged to use a wide range of concrete resources and varied models to represent problems and to support the development of their mathematical reasoning.

Lesson Structure

Our lessons follow a five part structure, which we call the 'Seeds of Learning':





Maths No Problem

Early maths skills in the Nursery are taught daily through counting rhymes, quality maths stories, practical maths provision activities and real life maths. As the children become more confident in counting, in rote, we begin to teach them the cardinal principle using a variety of maths manipulatives. Maths is carefully planned in the pre-school as a weekly input, based on the observations of the children and children then have the opportunity to engage in challenging maths enhancements in continuous provision, inside and outside.

In Reception, children are introduced to Maths No Problem Foundations, where children begin their mastery journey. Maths No problem meets all the requirements of the revised EYFS framework and encourages learning through play and helps the children develop a deep understanding of the world of mathematics. Children are taught an objective a week and use a variety of short whole class taught sessions, small group work, individual written work and linked activities within continuous provision to secure the children's understanding of this.

In KS1 and KS2 we use our enhanced version of Maths No Problem: a textbook and workbook maths mastery programme which incorporates the Singapore Maths Approach. Each lesson begins with a reflective exploration, which is rooted in the context of an In Focus problem. All children are encouraged to use concrete resources and varied models to problem solve, before explaining their mathematical thinking in a reflective maths journal. Children are then guided through practice before reviewing their knowledge in maths workbooks. Children who grasp the concept more quickly, are encouraged to 'Go Deeper', where they can explore the concept further.

Teaching of Fluency

Daily arithmetic practise is built into each day, where children can practise skills previously taught. During this time, answers are unpicked as to whether they are a mental calculation or written and strategies are discussed, supporting children to make connections between numbers. The aim of this is to develop their mental strategies further and also allow them to 'over learn', key written methods to support application in other areas of maths.



Concrete, Pictorial and Abstract

We implement our approach through high quality teaching delivering appropriately challenging work for all individuals. To support us, we have a range of mathematical resources in classrooms including Numicon, Base10 and counters (concrete equipment). When children have grasped a concept using concrete equipment, images and diagrams are used (pictorial) prior to moving to abstract questions. Abstract maths relies on the children understanding a concept thoroughly and being able to use their knowledge and understanding to answer and solve maths without equipment or images

Assessment

Through our teaching we continuously monitor pupils' progress against expected attainment for their age, making formative assessment notes against objectives for each lesson. End of chapter reviews are recorded and planning adapted to address misconceptions. Summative assessments are completed at the end of each term using Maths No Problem tests; their results form discussions in termly Pupil Progress Meetings and update our summative school tracker. Results from these are analysed and planning for the next term is adapted where required to address any whole class issues that have arisen. The main purpose of all assessment is to always ensure that we are providing excellent provision for every child.

Continuing Professional Development (CPD)

We continuously strive to better ourselves and frequently share ideas and things that have been particularly effective. We take part in training opportunities and regional networking events, such as the NCETM Maths Hub work groups. Maths No Problem online also provides CPD videos for teachers for different units they are teaching, which we actively encourage teachers to use whilst planning the learning for the children.

Impact

The impact of our maths teaching is regularly assessed through:

Pupil Voice

Through discussion and feedback, children talk enthusiastically about their maths lessons and speak about how they love learning about maths. They can articulate the context in which maths is being taught and relate this to real life purposes. Children show confidence and believe they can learn about a new maths area and apply the knowledge and skills they already have.

Evidence in Knowledge



Pupils know how and why maths is used in the outside world and in the workplace. They know about different ways that maths can be used to support their future potential. Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations. Children demonstrate a quick recall of facts and procedures. This includes the recollection of relevant times tables.

Evidence in Skills

Pupils use acquired vocabulary in maths lessons. They have the skills to use methods independently and show resilience when tackling problems. The flexibility and fluidity to move between different contexts and representations of maths. Children show a high level of pride in the presentation and understanding of the work. The chance to develop the ability to recognise relationships and make connections in maths lessons. Teachers plan a range of opportunities to use maths inside and outside school.

Outcomes

At the end of each year we expect the children to have achieved Age Related Expectations (ARE) for their year group. Some children will have progressed further and achieved greater depth (GD). Children who have gaps in their knowledge receive appropriate support and intervention. All children secure long-term, deep and adaptable understanding of maths which they can apply in different contexts.

At Streethay, we will know that we have created champions of mathematics because children:

- *Have an understanding of the key concepts they are learning about.
- *Can make connections within their maths work.
- *Can use the skills of using and applying.
- *Have a fluent recall of number facts
- *Can problem solve to find answers.
- *Can think independently.
- *Can reason about the maths they are doing.
- *Have a variety of strategies to draw from.