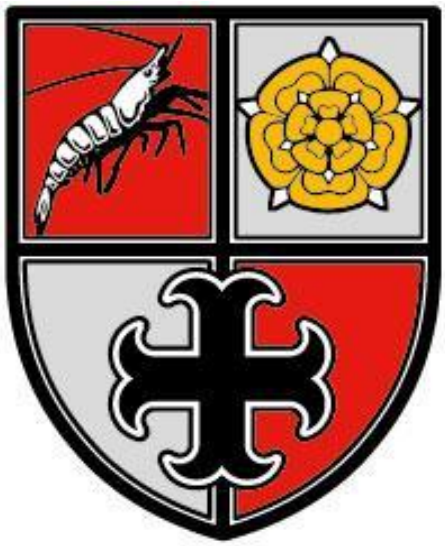
MARSHSIDE PRIMARY SCHOOL



Maths Policy

Autumn 2022

Date Approved by Full Governing Body	**Autumn 2022**
Chair:	**Andrew Brown**
Headteacher:	**Natasha Sandland**
Review Date:	**Autumn 2024**

EQUALITY STATEMENT

Our school recognises children's diverse circumstances and is committed to its legal responsibilities under the Equality Act 2010. Each child regardless of their background could be a victim of child abuse and is therefore entitled to the same degree of protection and support.

We have carefully considered and analysed the impact of this policy on equality and the possible implications for pupils with protected characteristics, as part of our commitment to meet the Public Sector Equality Duty (PSED) requirement to have due regard to the need to eliminate discrimination, advance equality of opportunity and foster good relations.

This policy has been equality impact assessed and we believe that it is in line with the Equality Act 2010 as it is fair, it does not prioritise or disadvantage any pupil and it helps to promote equality at this school.

Maths Policy

October 2022

Intent

At Marshside we have worked to develop and grow the Marshside Curriculum to best meet the needs of our pupils as individuals. Our aim is for all pupils to feel valued, included and enabled to thrive. Pupils are encouraged to work to the best of their ability and to take responsibility for their own learning. As teachers we adapt learning opportunities to ensure that all children can enjoy maths lessons, make progress and experience success within their learning. Where possible we aim to incorporate are unique setting into learning opportunities so pupils are better able to understand the real world value of maths.

Our aim is to raise standards in maths through the development of confident and competent mathematicians who are able to apply and connect their understanding of mathematical concepts across the curriculum. We want our pupils to become fluent in maths and to apply their number skills to reasoning and problem solving opportunities through a mastery approach to learning which is designed to embed and build upon taught knowledge and understanding. Communication is essential for the development of reasoning and problem solving skills and we use maths talk to encourage pupils to justify and explain their understanding, we want our pupils to understand the why as well as the how of mathematics.

Implementation

We follow a teaching maths for mastery approach which stems from high performing Asian nations such as Singapore. When taught to master maths, children develop their mathematical fluency without resorting to rote learning and are able to solve non-routine maths problems without having to memorise procedures.

Our mathematical teaching incorporates the NCTEM guidance on five key themes:

1. **Coherence** – Lessons are broken into small, connected steps
2. **Representation and Structure** – Representations reveal the mathematical structure
3. **Mathematical Thinking** – Ideas are worked on, reasoned with, and discussed with others
4. **Fluency** – Facts and procedures are quickly and efficiently recalled
5. **Variation** – Concept are often represented in more than one way

Maths is taught daily in all classes for between 45 minutes and 1 hour. In addition to the main maths lesson pupils complete daily fluent in five calculations in order to develop number and calculation fluency. We follow the Maths No Problem scheme of learning from Reception to Year 6

Lesson Structure:

We follow a three stage lesson structure:

Exploration (Explore)

During this part of the lesson, learners will be working in groups exploring the task themselves, this could be with concrete resources, modelling, pictorial representations or written calculations. After teachers have presented the problem and set a time for exploration, their role is observation and assessment. They are giving their class independence to experiment.

Structured Discussion (Master)

This part of the lesson is a teacher-led whole class discussion. The aim is for the teacher to use targeted questions to draw out from the group, different methods to discuss and any misconceptions to rectify. The questioning will be based on: 'What are you doing in this strategy to solve the problem and why are you doing it?'

Practice

In the Maths — No Problem! programme there are two types of practice:

Guided Practice - found in the textbook - learners work through the questions in pairs.

Independent Practice - found in the workbook - pupils work through these by themselves.

Challenge and adaptation – teacher questioning is used to challenge and deepen learning. Learners who may have difficulty understanding a concept are supported within a small group using additional resources and real-life modelling to develop their understanding. Some children may access additional maths teaching outside of the maths lesson to reinforce key concepts. Occasionally children may be offered additional Maths tutoring. Some children with an identified SEND need may be working on an adapted curriculum.

Assessment:

Teachers assess children's understanding formatively throughout maths lessons using rapid marking and questioning to identify misconceptions, gaps in knowledge, conceptual understanding and the need for further challenge. Summative assessments are completed using Maths No Problem assessments during Autumn Term 2, Spring Term 2 and Summer Term 2. The results of these assessments inform intervention planning and the need to adapt teaching if necessary.

Working Walls:

Working walls need to be updated regularly and should reflect the unit being studied. They will identify key vocabulary alongside examples of appropriate calculations and strategies. Pupils should access working walls to aid them with their learning.

Homework:

All parents can access the Maths No Problem parent hub. Homework will be communicated using Class Dojo.

Impact

Data is used alongside pupil discussion, shared book scrutiny and lesson observations to evaluate the impact of the maths curriculum on pupil attainment, understanding and progress.

We aim to see improvements in:

- Attainment in line with national expectations
- Children's reasoning ability, confidence and understanding of mathematical concepts
- The progress of all learners
- Children's enjoyment of mathematics
- Children ability to reason when tackling new problems.