

# **MATHS POLICY**

Formally adopted by the Governing Body of Sheringham Community Primary & Nursery School	
On	26 <sup>th</sup> January 2023
Chair of Governors	Steward
Head Teacher	Reater
Last updated	26 <sup>th</sup> January 2023
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Be all that you can be...





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#### **SCPS Maths Vision Statement**

All children enjoy and can succeed in mathematics.

It is our belief that mathematics should equip pupils with a uniquely powerful set of tools to help them to understand the world around them. We endeavour to ensure that all children at Sheringham Primary School develop a positive and enthusiastic attitude towards mathematics that will stay with them throughout their life. These tools include the ability to think mathematically, reason and solve unfamiliar problems with fluency using a range of learnt strategies through collaborative and independent learning.

A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject. (National Curriculum 2014)

#### **Aims**

CARES (Community, Aspiration, Resilience, Emotional Well-Being):

In addition to the coverage of the national curriculum, Sheringham Community Primary School & Nursery have prioritised four extra elements, based on extensive consultation with stakeholders, designed specifically to meet the needs of the children growing up in our context.

They are Community, Aspiration, Resilience and Emotional Well-Being.

#### Community

We aim to provide carefully sequenced cumulative work, which allows learners to make connections between different mathematical concepts and contexts. This will enable them to build on prior learning and understand how mathematics fits into all aspects of life in their community.

## **Aspiration**

It is our aim that children will aspire to achieve success in mathematics by developing fluent number sense and mathematical thinking and vocabulary.

#### Resilience

Children will become resilient, confident and independent mathematical thinkers by applying deep conceptual understanding to maths learning throughout the curriculum.

#### **Emotional**

Our aim is for children at Sheringham Primary School to develop a lifelong love of mathematics, through lessons that encourage them to make connections and experience the joy of mathematics.



#### Skills and Knowledge

Mathematical understanding is not about memorising facts and procedures: it is about developing a deep conceptual understanding of number to solve problems. We aim to provide the children at Sheringham Primary School with the mathematical skills for life and the knowledge to be able to apply these to tackle problems with confidence.

#### **Curriculum Content**

In the Nursery and Reception years, the New EYFS Framework is followed with the aim of meeting ELGs in Number and Numerical Pattern.

The teaching of mathematics at KS1 and KS2 is based around the New National Curriculum 2014 and the Mathematics Guidance: Key Stages 1 and 2 Non-statutory Guidance for the National Curriculum June 2020.

Throughout the school White Rose maths Hub and the NCETM mastery documents are used to provide planning resources. Progression grids ensure that units of work are carefully sequenced and prior knowledge and skills are built upon from previous year groups and units.

Additional teaching resources are used at teachers' discretion to supplement lessons where appropriate. EG: nrich tasks.

EYFS and KS1 use the NCETM Mastering Number Programme to secure firm foundations in the development of good number sense.

#### **Mastery Learning**

Mastery is not a quick fix but a sustained and incremental process of owning and applying material over time. (Mary Myatt)

At each stage of learning, pupils should be able to demonstrate a deep, conceptual understanding of the area and be able to build on this over time. (TES)

At Sheringham Primary we aim to adopt a mastery pedagogical approach into our classrooms to ensure the best for our pupils so that every child has the opportunity to develop a deeper understanding through:

- making connected small steps
- mathematical thinking
- procedural and conceptual fluency
- use of representation and structure
- a consistent use of mathematical language



We aim to build children's confidence in all areas of maths for them to be able to apply the appropriate application for any given context, be it familiar or unfamiliar.

# Teaching and learning.

- In EYFS Mathematical learning takes place through whole class input and free flow learning activities.
- In EYFS the EYFS Framework for Maths ELGs of 'Number 'and 'Numerical Pattern', will be assessed in ongoing formative observations.
- Year 1 to 6 children will generally have a daily maths lesson. The timetable is flexible to allow for Maths Mornings and English Mornings. Time given to each subject will be equal.
- In EYFS and KS1 Mastering Number sessions take place within the day, generally in addition to the maths lesson.
- Learning Champions focus on targeted pupil groups. Progress and groups are reviewed each half term.
- Times Tables Rock Stars is used at years 2 6 to support and develop the understanding of multiplication and division knowledge.
- Across all areas of mathematics children will be encouraged to use the CPA (Conceptual, Pictorial and Abstract) approach to deepen their understanding.
- Children are encouraged to use and apply maths learning throughout the curriculum in different contexts, in maths lessons and in other areas of the curriculum.
- Pupils are given opportunities to develop their mathematical Oracy skills and the use of the correct vocabulary within lessons through the use of mathematical talk and sentence stems in lessons and regular Number Talks.
- Maths Whizz online Maths, forms part of the schools homework policy and is set weekly in Years 2-6. Years 1-6 have weekly ICT sessions on Maths Whizz in school.
- Marking Pupils are given immediate verbal feedback in lessons and opportunities are made to 'scoop' and support misconceptions.
- Reports Parents are kept informed of their child's progress through parent's evenings and half yearly reports indicating achievements.



- Teacher formative assessments are ongoing, termly summative assessments are carried out using PIXL learning assessments in Year 1-6 generating QLA data.
- Termly Pupil Progress Meetings and data reviews ensure that children's progress is monitored, and interventions put in place as necessary.

### **Teaching Approach**

#### **Co-operative Learning in Mathematics**

Cooperative Learning forms a key, consistent and central component to our teaching and learning approach.

Cooperative Learning is a way of ensuring that children develop communication skills and an acknowledgement that peers working together is an effective way of building skills vital for work and thought in the future. It helps to build confidence before independent work is undertaken. Cooperative Learning also encourages deeper and critical thinking skills as the follow up questions we usually ask are how and why?

Co- operative learning is a vital approach in developing the reasoning and mathematical thinking skills of all pupils and is integrated into all mathematics lessons.

#### **Vocabulary**

Communication of mathematical thinking is a vital skill and the children at SCPS are encouraged to verbalise their thinking with correct vocabulary using reasoning skills and sentence stems.

Number talks embedded into the weekly timetable encourage thinking and discussion related to mathematical tasks and the use of accurate vocabulary. For example, the term 'sum' will only be used to refer to an addition calculation. Correct mathematical vocabulary to be used for the four operations of addition, subtraction, multiplication and division can be found in the SCPS Calculation Policy. Mathematical Vocabulary for all areas of the Mathematics curriculum can be found in the SCPS mathematical Vocabulary Booklet.

#### Inclusion

All children have equal access to the curriculum regardless of background, prior attainment or SEND. We aim to incorporate mathematics into a range of experiences enabling all pupils to achieve success and reach as high a standard as possible. Further information can be found in our statement of equality information and objectives, and in our SEN policy and information report.



#### **Links to Policies:**

This policy should be read in conjunction with the:

- Calculation Policy
- SCPS mathematical Vocabulary Booklet
- EYFS Policy
- Feedback Policy
- Assessment, Recording & Reporting Policy
- Homework Policy
- SEN Information Report

This policy reflects the requirements of the <u>National Curriculum programmes of study</u>, which all maintained schools in England must teach.

The schools also adopts the guidance set out in the <u>Mathematics Guidance</u>: <u>Key Stages 1 and 2 Non-statutory Guidance for the National Curriculum June 2020</u>

In addition, this policy acknowledges the requirements for promoting the learning and development of children set out in the <u>Early Years Foundation Stage (EYFS) statutory</u> framework 2021

# Monitoring and review

We are aware of the need to review and update the school mathematics policy regularly to take into account new initiatives, changes in the curriculum and assessment. We will review this policy in January 2024.