



# **Rudston Primary School**

## **Mathematics Policy**

**Date: September 2022**

**Subject Lead(s): Mr I. Robinson, Mr  
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**This policy and all school policies are produced in accordance to  
guidance set out in our school legislation and guidance policy.**

**Approved by Governors: Draft September 2023**

**Review: September 2024**

**Our Mission Statement:**

To develop a love of learning,  
enabling all children to reach their full  
potential.

\* Respect \* Resilience \*  
\* Responsibility \* Enjoyment \*  
\* Challenge \*

**Safeguarding Statement:**

“Rudston Primary School is  
committed to safeguarding and  
promoting the welfare of children and  
young people and expects all staff  
and volunteers to share this  
commitment.”

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### 1.1 Maths at Rudston Primary School

Mathematics is a key skill and core subject that all children need to feel confident with, through developing their ability to calculate, reason and solve problems. It is used in daily life and helps us to make sense of the world around us.

Mathematics can be taught cross-curricular but is also taught discreetly in all classes each week. Basic skills are also integral to our drive to further our children's learning in mathematics and thus, timetabled throughout the week.

### 1.2 Intent

The 2014 National Curriculum for Maths aims to ensure that all children:

- Become fluent in the fundamentals of Mathematics
- Are able to reason mathematically
- Can solve problems by applying their Mathematics

At Rudston Primary School, these skills are embedded within **challenging** Maths lessons and developed consistently over time. We are committed to ensuring that children are able to recognise the importance of Maths in the wider world, becoming **resilient** in their approach and that they are also able to contextualise their mathematical skills and knowledge. We want all children to **respect** and **enjoy** Mathematics and to experience success in the subject, with the ability to reason mathematically. We are committed to developing children's curiosity about the subject, as well as an appreciation of the beauty and power of Mathematics.

### 2.1 Implementation

### 2.2 Mastery Approach to Mathematics

At the centre of the mastery approach to the teaching of mathematics, is the belief that all pupils have the potential to succeed. They should have access to the same curriculum content and, rather than being extended with new learning, they should deepen their conceptual understanding by tackling challenging and varied problems.

The whole school works in-line with the revised 2014 curriculum with year 1 – 6 following the Maths No Problem scheme. This scheme follows the concrete, pictorial, abstract approach.

This means:

**Concrete** – Teaching will be heavily resource based. The children will first be introduced to an idea/skill by acting it out with real objects. This is the foundation for conceptual learning.

**Pictorial** – Children will be allowed to draw and mark make, to-make visual representations, to help them understand the idea/skill they are learning. The students now relate the hands-

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on approach to visual diagrams and pictures. Working walls will display a blank number line and clear direction to previous learning from last week, last month and last year alongside vocabulary for the topic.

**Abstract** – When children are confident with both the concrete and pictorial stage, they progress onto the abstract which is where children will now be able to represent problems using mathematical notation. This is where children will be given opportunities to apply the skills they have learnt in a variety of ways.

Children will have the time and space to work at and consolidate a concept without being rushed and moved on. Children will trial the same idea in a variety of ways to 'master' that skill – meaning they can do it in any situation with any numbers.

Children are to be challenged to recall previous knowledge with a pre-topic assessment and teachers are to then follow this up with a series of recall days to unpick findings and prepare the children for new learning effectively. This is supported by a series of progress maps that teachers should display on their working walls to enhance understanding.

To support arithmetical learning, teachers are to use Mastering Number Group resources from Reception to Year 2 and Years 3-6 are to complete 5x 30 minute slots in streamed groupings which are to be assessed each term with teacher judgement and formative assessment opportunities used to inform groupings. Children may record their basic skills learning in Jotters to build up their experience.

### 2.3 Early Years

Our Early Years will follow the White Rose Maths programme of study which is in line with early learning goals. Mathematics in early years involves providing children with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems: and to describe shape, spaces and measures. Children are given opportunities to reach these goals whilst being guided, observed and challenged by a professional. White Rose Maths has a big emphasis on basic skills for reception children whilst providing continuous provision linked to the topics and matching story books.

### 2.4 Homework

There is a requirement for teachers to set homework on a weekly basis using the MathShed online platform, as well as this, children may be expected to practice their tables or mental maths skills to help improve fluency alongside Times Tables Rockstars. Children in Year 6 have access to written practise options.

### 2.5 Assessment

Children's work will be marked according to the agreed school policy and their performance continually assessed by the teacher.

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Each chapter/topic should be assessed and children who achieved significantly more or significantly less than the expected standard should be recorded. Reference to these children should also be made in teachers' weekly planning meetings, in order to alert the phase leader or senior leadership team to any difficulties or misconceptions.

We make long-term assessments towards the end of the school year and use these to assess progress against end of year expectations. We can then set targets for the next school year and make a summary of each child's progress before discussing it with parents. We pass this information on to the next teacher at the end of the year, so that s/he can plan for the new school year.

We make the long-term assessments with the help of end-of-year tests and teacher assessments. We use the national tests for children in Year 2 and Year 6. We also make termly assessments of children's progress measured against the end of year expectations.

### **2.6 Equal Opportunities**

The teaching of mathematics will be in accordance with the present policy for Equal Opportunities. We intend to provide a curriculum which caters for the needs of all individuals and sets them up with the necessary skills and knowledge for them to become successful in their future adventures. We aim to prepare them for a successful working life. We incorporate sustained levels of challenge through varied and high-quality activities with a focus on fluency, reasoning and problem solving. Pupils are required to explore maths in depth, using mathematical vocabulary to reason and explain their workings.

### **2.7 Resources**

All major maths resources are centrally located in the maths resource area. Apart from bulky items, all resources are stored in labelled boxes. Teachers are requested to remove the whole box when equipment is being used and to return it promptly to the correct place when no longer required.

In each classroom, teachers must display a Maths Working Wall and a Maths Help desk that reflect current learning through numerical and pictorial representations as well as concrete apparatus. Teachers are expected to use arithmetic resources such as counting sticks and games as well as online resources to promote arithmetic practise.

### **3.1 Impact**

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.

Furthermore: -

- Children demonstrate a quick recall of facts and procedures. This includes the recollection of multiplication facts.

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- Children show confidence in believing that they will achieve.
- The flexibility and fluidity to move between different contexts and representations of maths.
- The chance to develop the ability to recognise relationships and make connections in maths lessons.
- 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 show a high level of pride in the presentation and understanding of the work

### **4.1 Policy Review**

This policy was written by Ian Robinson, Jay Clarke and Tom Carney in September 2023, and put forward to governors.

The policy will be reviewed by September 2024.

**This policy is subject to change and is updated when necessary, in accordance with government adaptations and the needs of our children.**