Hunton & Arrathorne Community Primary School Mathematics Policy

Date: April 2025	Headteacher: Mr S Donaldson
Review Date: April 2026	Chair of Governors: Mrs A Peacock

Aims

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 Hunton and Arrathorne, these skills are embedded within 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 and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to 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 and supporting them through innovative teaching styles, accompanied by rich resources and cross-curricular links.

Organisation

From their start in Reception, the children have daily mathematics lessons.

Planning Structure

As a school, we have developed our own long-term plan using resources from the NCETM and White Rose Maths. Class teachers then create a unit plan, based on the National Curriculum objectives. They use schemes of learning such as the White Rose and NCETM to support, but are passionate about children receiving a wide and varied diet of Maths. Following the

teaching of the '5 Big Ideas' we recognise that varied representations, including the use of concrete and pictorial resources, is highly beneficial; teachers are encouraged to use these models throughout a unit of learning.

In addition to the long-term plan, we also have bespoke progression document for the teaching of calculations. When teaching these aspects, teachers follow these documents to ensure consistency throughout school.

Lesson Structure

Active Counting (5 minutes)

Each class has approximately 5 minutes rapid recall of counting per day – this could include key number bonds, multiplication tables or other curriculum related tasks. Such activities might include: use of the counting stick, times table songs, relay work, chanting etc. This is in addition to the 'Diamond Dash' which children complete at the start of each day.

Retrieval (5 minutes)

Each lesson begins with an open-ended retrieval activity, this can follow 'goal free approach', use the Flashback 4 to provide varied fluency or be more active. Teachers use highly skilled questioning to adapt teaching; pupils are encouraged to talk purposefully and apply mathematical vocabulary whilst developing speaking and listening skills. Teachers draw upon previous formative and summative assessment to identify skills and knowledge which may need embedding further through the use of retrieval activities.

Lesson Objective

The lesson objective is shared with the children.

Key Vocabulary & Sentence Stems

Key vocabulary is identified at the start of each unit and is interwoven into each lesson. This may be done through the use of sentence stems to encourage children to 'talk like a mathematician'.

Lesson Content

The content of each lesson may vary based upon the objective, the children's prior understanding and the stage of their learning. Teachers can be guided by the small steps to ensure that knowledge is built upon sequentially. Lessons should incorporate the 'Teaching for Mastery' approach to ensure children are exposed to concrete, pictorial and abstract representations. Throughout each objective, children should be given the opportunity to develop their fluency, varied fluency and problem-solving skills as well as opportunities for

deep practice where appropriate. Children should be taught the skill of reasoning – either through a discrete lesson, group work, or as part of an activity.

Reflection

This may involve a recap of knowledge, children self-marking or additional extensions. Where possible, real life links should be clearly explained to the children.

The teacher may decide to follow the above sequence within the initial lesson and stop the children after each part, moving some children on. Equally, they may decide to hold a whole class input first and then allow the children to work through problems independently.

Learning Environments

Learning environments should be maths rich. Resources should be readily accessible to the children. In addition, each classroom should include:

Age appropriate number lines (linked to curriculum objectives)

- A hundred square
- Concrete resources which are readily accessible
- Squared paper for modelling
- A vocabulary section
- Sentence stems

Presentation

Children worked in squared maths books which are clearly labelled in the school style. Children use one square per digit and are encouraged to present their work to the best of their ability. When paper is used, it is trimmed and children are taught how to stick it in neatly. All work has a date and learning objective which starts with 'I can…' and an objective clearly linked to the national curriculum. Objectives may be provided for the children or written themselves depending on their age and ability. Children start a new page for each piece of work.

Marking & Feedback

Our emphasis will be on 'live marking' with either the children marking their own work (blue pen) or teacher marking correct or incorrect answers.

The teacher will not provide written comments in maths books, instead whole class feedback or individual verbal feedback will be given. Children will make corrections in a purple pen.

Diamond Dash

'The Diamond Dash' is a key part of Mathematics within our school – it is a programme designed to accelerate children's fluency in multiplication and division facts. Children take part in the 'Diamond Dash' from Reception where it starts with oral counting, through to the end of Key Stage 2, with a range of multiplication, division, square numbers, cube numbers, square roots and decimals. Ten minutes of each day are allocated to this.

Assessment & Impact

The school has a supportive ethos and our approaches support the children in developing their collaborative and independent skills, as well as empathy and the need to recognise the achievement of others. Children can underperform in Mathematics because they think they can't do it or are not naturally good at it. Our programme addresses these preconceptions by ensuring that all children experience challenge and success in Mathematics by developing a growth mindset. Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child. Our mathematics curriculum is high quality, well thought out and is planned to demonstrate progression. Within each objective, children should access varied fluency, the opportunity to reason and problem solve. Children use mathematics books to record their progression which are marked in accordance to our feedback policy.

The expectation is that the majority of the children will move through the domains of mathematics and where needed, will access 'keep up' interventions to ensure they do not fall behind. Staff monitor this through the use of the Insight Tracking assessment package which is formally monitored on a termly basis. In conjunction with this, teacher's make sound teacher assessment judgements through the use of summative assessments, using White Rose termly assessments and past SAT's papers for Y6. Progression in mental calculations is assessed half-termly through our 'Progression in Mental Arithmetic' tracker. Rigorous assessment of this tracker ensures gaps are closed readily and children are secure in their mental knowledge at the end of each stage of learning.

Related Policies:

- Progression in Mental Calculations Guidance
- Progression in Calculations Guidance
- Mathematics Non-Negotiables