

Maths Policy
Please also use in conjunction with the below policies:
<ul> <li>Written and manipulatives calculation policy</li> <li>Maths mastery policy</li> <li>Written calculation policy</li> </ul>
Signed: Date: Date: Chair of Governors
Signed: Date: Date:
Adopted and Approved by the Governing Body: <b>October 2023</b> Review Date: <b>October 2027</b>

#### Aims

The aims of the 2014 National Curriculum are for our pupils to:

- become fluent in the fundamentals of mathematics through varied and frequent practice with complexity increasing over time
- develop conceptual understanding and ability to recall and apply knowledge rapidly and accurately
- reason mathematically; follow a line of enquiry, conjecture relationships and generalisations
- develop an argument, justification and proof by using mathematical language. problem solve by applying knowledge to a variety of routine and non-routine problems, breaking down problems into simpler steps and persevering in answering

The National Curriculum sets out year-by-year programmes of study for Key Stages 1 and 2. This ensures continuity and progression in the teaching of mathematics.

The EYFS Statutory Framework 2014 sets standards for the learning, development and care of pupils from birth to five years old and supports an integrated approach to early learning. This is supported by the 'Development Matters' non statutory guidance as well as the White Rose Medium Term plans for EYFS Mathematics.

The EYFS Framework in relation to mathematics aims for our pupils to:

- develop and improve their skills in counting
- understand and use numbers
- calculate simple addition and subtraction problems
- describe shapes, spaces, and measures

### Intent

The intent of our Mathematics curriculum is to be accessible to all and to maximise the development of every child's ability and academic achievement. Every child has an equal opportunity to access maths at their level and pace and this is catered for through differentiation to enhance a safe learning environment. We want children to make rich connections across Mathematical ideas to develop fluency, reasoning and problem solving and their taught resilience will enhance and develop these skills. Within (and beyond) lessons, children are challenged with "next steps" and extensions, creating a culture, where, within lessons, our learners want to be ambitious in all that they access and achieve. Our pupils will learn to apply their Mathematical knowledge not only within their Mathematics lessons but also across the curriculum, for example in Art, Science, Geography and DT. We want our pupils to understand that a confident understanding of Mathematics is the bedrock for Science, Technology and Engineering (STEM), necessary for the management of every day finances and a crucial component of most forms of employment. As our pupils progress, we intend that they: be able to calculate swiftly and accurately; have the ability to reason mathematically; have an appreciation of the beauty and power of mathematics and a sense of enjoyment and curiosity about the subject.

## Implementation

How mathematics is planned and taught:

To ensure whole school consistency and progression, teachers use the White Rose planning scheme to support their long-term planning, following the progression map for each year group. White Rose suggests how long to spend on each block of learning, but the length of time spent is down to individual teachers to decide what is best for their classes' learning. The White Rose curriculum is a cumulative curriculum, so that once a topic is covered, it is met many times again in other contexts. For example, place value is revisited in addition and subtraction and multiplication and division. The curriculum ids designed to have an emphasis on number, with a large proportion of time spent reinforcing number to build competency.

## Impact

The school's supportive ethos and approach to learning supports the children in developing their collaborative and independent skills within maths. The school's use of White Rose Maths addresses any preconceptions by ensuring that all children experience challenge and success in Mathematics by developing and applying a growth mind-set. Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child. These factors ensure that we are able to maintain high standards, with achievement at the end of KS2 meeting the national average.

### Planning

#### Long term planning

The National Curriculum for Mathematics 2014, Development Matters and the Early Learning Goals (Number, Shape, Space & Measure) provide the long term planning for mathematics taught in the school.

### Medium term planning

Years EYFS to 6 use the White Rose Maths schemes of learning as their medium term planning documents. These schemes provide teachers with exemplification for mathematics objectives and are broken down into fluency, reasoning and problem solving, key aims of the National Curriculum.

They support a mastery approach to teaching and learning and have numbers at their heart. They ensure teachers stay in the required key stage and support the ideal of depth before breadth. They support pupils working together as a whole group and provide plenty of time to build reasoning and problem solving elements into the curriculum.

#### Short term planning

The above schemes of learning support weekly planning and are monitored at intervals by the mathematics subject leader. EYFS planning is based on the medium term plans and delivered as appropriate to individual pupils with thought to where the pupils are now and what steps they need to take next.

All classes have a daily mathematics lesson where possible. In Key Stage 1 lessons are 45-60 minutes and in Key Stage 2 at least 60 minutes. Within Key Stage 2, times tables are explicitly taught and practiced within these maths lessons, using Times Tables Rockstars.

Teachers of the EYFS ensure the pupils learn through a mixture of adult led activities and pupil initiated activities both inside and outside of the classroom. Mathematics is taught through an integrated approach.

#### <u>Assessment</u>

Assessment in mathematics is continuous, using a range of verbal, self and peer feedback. Teachers assess each child's understanding of each objective by marking their WALT in green/orange. Children requiring additional support or extension are identified by the teacher and directed appropriately. Singlewell use the NFER testing to assess the children's learning 3 times annually and gap analysis are used to inform future planning and target children requiring intervention. In addition, in KS2, children's knowledge of their multiplication facts are also assessed at regular intervals by producing a "heat map" from each child's Times Table Rockstars account to further support the rapid recall of times tables up to 12x12.

# Marking (for further detail please see the school's marking policy)

Marking of pupils' work is essential to ensure they make further progress. Work is marked against success criteria, in line with the school marking policy, and includes next steps at least 3 times per week. Pupils are encouraged to self-assess their work and are given time to read teachers' comments and make corrections or improvements. Responses to marking are made as close to the work as possible, ideally at the start of the next lesson.

# Role of Subject Leader

The maths subject leader will:

- To monitor the teaching and learning of mathematics throughout the school, ensuring that it is in line with the progression document.
- To conduct lesson observations/learning walks to ensure good to outstanding teaching and effective use of resources and working walls.
- To identify areas for improvement linked to the School Improvement Plan.
- To be responsible for the mathematics budge.
- To monitor, assess and develop the roles of all teachers in maths.
- To monitor and evaluate pupil progress throughout the school in maths and set goals accordingly.
- To promote a love of mathematics and raise engagement with Times Tables Rockstars.

## <u>Review</u>

This mathematics policy will be reviewed by the subject coordinator, following discussions with the Head teacher and other colleagues. Any amendments will be presented to the whole staff and Governing Body before implementation.

Written by E.Watson – September 2023