**The Martin Wilson Policy for Mathematics**

DRAFT

**Statement of Intent**

The children at Martin Wilson Primary school will:

* Become fluent in the fundamentals of mathematics.
* Develop conceptual understanding and the ability to recall and apply knowledge.
* Explain their mathematics confidently and mathematically.
* Reason and problem solve by applying mathematics to a variety of increasingly complex problems.
* Develop resilience to enable them to reason and problem solve confidently.

**Introduction**

National Curriculum 2014 states:

*Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history’s most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. 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.*

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

* Become fluent;
* Reason and explain mathematically;
* Be able to solve problems.

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 children from birth to five years old and supports an integrated approach to early learning. This is supported by the ‘Development matters’ non statutory guidance.

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.

**Aims**

The school’s aims are as follows:

* To foster an atmosphere of encouragement, support and respect for the achievements of every child;
* To develop high levels of independence and motivation in the children to ensure the active engagement of all pupils;
* To support the children’s mathematical understanding through the use of manipulatives and representations throughout the school;
* To teach the children to solve problems;
* For children to reason, to think logically and to work systematically and accurately;
* To enable children to develop a rich network of mathematical knowledge and to understand the connections between different aspects of maths;
* To ensure that all children are able to fully access the Mathematics curriculum;
* To create opportunities to reinforce mathematical concepts across the curriculum.

**Breadth of study**

Careful planning and preparation ensures that throughout the school children engage in:

* practical activities and games using a variety of resources;
* problem solving to challenge thinking;
* individual, paired, group and whole class learning and discussions;
* purposeful practise where time is given to apply their learning;
* open and closed tasks;
* a range of methods of calculating e.g. mental, informal jottings and formal written methods.

## Mathematics curriculum 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**

The medium term planning is based on the White Rose planning, but has been re-organised by the Maths leader (based on advice from the Maths Hub teaching for mastery lead) to ensure that the children revisit place value, calculation and fractions every term, rather than meeting them once.

**Short term planning**

The above schemes of learning support daily lesson planning. Teachers are free to plan in a way that suits them best. There is no expectation for any formal, written, daily planning.

All classes have a daily mathematics lesson where possible. In both key stages, lessons are approximately an hour long.

**The Foundation Stage**

EYFS planning is based on the long term plans and delivered as appropriate to individual children with thought to where the children are now and what steps they need to take next.

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

The reception class also uses White Rose to support their teaching

**Mathematics and Inclusion**

At our school, we teach mathematics to all children, whatever their ability and individual needs. Mathematics forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our mathematics teaching, we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents and those learning English as an additional language, and we take all reasonable steps to achieve this. For further details, see separate policies: Special Educational Needs; Disability Discrimination; Gifted and Talented Children; English as an Additional Language (EAL).

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, differentiation – so that we can take some additional or different action to enable the child to learn more effectively. Assessment against the National Curriculum allows us to consider each child’s attainment and progress against expected levels. This ensures that our teaching is matched to the child’s needs.

Children with IEPs may have specific targets relating to mathematics.

Termly targeting of pupils falling below the expected levels of progress and termly pupil progress meetings, enables the school to ensure the needs of all children are being met.

**Assessment for Learning**

Assessment is an integral part of teaching and learning and is a continuous process. Teachers make assessments of children daily through:

• Regular marking of work;

• Analysing errors and picking up on misconceptions;

• Asking questions and listening to answers;

• Facilitating and listening to discussions;

• Making observations.

These ongoing assessments inform future planning and teaching.

Teachers carry out pre and post unit assessments to ensure that their teaching is covering the aspects that the children really need and assessing their overall understanding and ability to apply the concepts learned.

In years 1-6 termly assessments are carried out using NTS assessment materials, in line with the school’s long term planning. These materials used alongside judgements made from class work support teachers in making an assessment for each child which is entered on to the MARK assessment system .

Teachers in years 1-6 track the progress of the children in mathematics against mathematics objectives statement for the year group. This process of careful tracking adds to helping teachers form an assessment for each child.

Teachers at years 2 and 6 also assess their children using past SAT papers and for Y6, the national tests in the summer term.

**Use of additional adults**

Additional adults have a key role to play during the mathematics session, which will vary according to the focus. Each adult is aware of the learning objectives for the lesson and teaching assistants (TAs) may focus on IEP or individual targets. TAs leave feedback for the teacher about the progress that the pupils have made or barriers to learning etc., using a book specifically for Maths notes. TAs have a vital role to play in supporting or teaching different groups.

**Organisation of resources**

Each classroom has apparatus available for the children including a bead bar, bead strings, counters, dice and calculators and a range of appropriate small apparatus. In addition to this there is a central store of resources located outside base 10, which contains the less used and also larger equipment such as trundle wheels, weights and balances.

Teachers make good use of interactive whiteboard materials, including the NCETM professional development materials, ITPs and the Primary Games materials.

**Monitoring**

Arrangements are made for regular monitoring of Mathematics, in order to evaluate the quality of planning and its impact in the classroom. During the year monitoring of teaching, books and planning, will be made by both the headteacher and the mathematics subject leader.

**Responsibilities of the subject leader**

The coordination and planning of the mathematics curriculum are the responsibility of the subject leader, who also:

* supports colleagues in their teaching, by keeping informed about current developments in mathematics, and by providing a strategic lead and direction for this subject;
* Monitors the planning, teaching and learning of mathematics throughout the school;
* Helps raise standards in maths;
* Provides staff with CPD opportunities in relation to maths, within the confines of the budget and the School Improvement Plan;
* Monitors and maintains high quality resources.

**Christina Cubbin**

**Mathematics subject leader**

**November 2024**