

WITHERLEY CE PRIMARY SCHOOL

'Let your light shine'

MATHEMATICS POLICY

INTRODUCTION

This policy outlines the teaching and learning of mathematics at **Witherley CE Primary School**. The schools policy for mathematics is based on 'The 2014 National Curriculum' from Foundation Stage to Year 6. The implementation of this policy is the responsibility of all the teaching staff.

INTENT

At Witherley CE Primary School pupil will:

- Be able to calculate accurately and confidently using the four operations.
- Have quick recall of times tables facts and key age related facts to enable fluency in Mathematics.
- Be able to derive answers from knowledge held in their long-term memory.
- Be able to reason in Mathematics, using a range of precise mathematical vocabulary, including well-structured stem sentences.
- Be able to represent their thinking through the use of models, images and concrete apparatus.
- Be able to problem solve, using a range of strategies, including bar modelling and choosing the most efficient methods.
- Show resilience when tackling a difficult problem and be able to describe the small steps to achieve a solution.
- Be confident in the topics taught within the National Curriculum showing age appropriate fluency, knowledge and skills to reason and problem solve in a variety of contexts.

IMPLEMENTATION

What does our Mathematics Curriculum look like?

We have adopted a Mastery approach in Mathematics, following CPD for staff. We have shared expertise and good practice throughout the school. The 'White Rose Schemes of Learning' provide the small steps planning for Key Stage 1 and 'Rising Stars Planning' provides the repetition required in Key Stage 2. These are supplemented by resources from a range of sources including: The White Rose Maths Hub, NCETM, Nrich, Classroom Secrets, Third Space Learning, Twinkl, and much more. Teachers plan and sequence small steps for the needs of their class, following formative assessment daily, this includes daily revision starters to support children memory of what has been taught. The Mathematics leader is responsible for keeping a pace with developments in Mastery resources and theories and attends termly subject leaders meeting and network meetings. Teachers share good practice and knowledge of high quality resources with each other and teachers in other settings.

IMPACT

Our Mathematics curriculum facilitates sequential learning and long-term progression of knowledge and skills. Teaching and learning methods provide regular opportunities to recap acquired knowledge through high quality questioning, discussion, modelling and explaining, to aid retrieval at the beginning and end of a lesson or unit. This will enable all children to alter their long-term memory and know more, remember more and be able to do more as mathematicians.

ADDITIONAL NEEDS

- Questions and tasks are differentiated and sometimes targeted at specific children.
- Teachers use a wide range of concrete and pictorial models and images as visual resources to illuminate meaning for all pupils.

- During whole class teaching, discreet help is given to particular children wherever possible.
- During activities, children are supported by teachers or teaching assistants where appropriate to the learning.
- Same day intervention ensures that misconceptions are addressed in a timely fashion.

WORKING WALL

There will be a maths working wall in each classroom, which has a similar structure throughout the school. To support children's learning, each working wall will have work that is relevant to current learning where children can view weekly learning, mathematical vocabulary and where efficient methods, misconceptions or mistakes can be discussed and used as a teaching and learning point. The working wall will also show previous work, e.g. This week, Last week, Last term and Last year.

INTERVENTION PROGRAMMES

Teaching is focused, rigorous and thorough, to ensure that learning is sufficiently embedded and sustainable over time. Long-term gaps in learning are prevented through speedy teacher intervention. More time is spent on teaching topics to allow for the development of depth and sufficient practice to embed learning. Carefully crafted lesson design provides a scaffolded, conceptual journey through the mathematics, engaging pupils in reasoning and the development of mathematical thinking. The timetable has been adjusted so that 'same day intervention' is possible. During a break in teaching, a teacher and TA can identify misconceptions so that a group of children can be targeted during the next short session. Similarly, where a child has been identified as moving swiftly through a task, they can be progress onto deeper thinking and learning.

At times, children may need specific 1:1 support in order to 'keep up' with the rest of the class. The following intervention programmes are used when appropriate to help children who are currently performing below age – related expectations:

Wave 3

Power of 2

Numicon

These are usually taught by teaching assistants, class teachers or the SENCO, through small intervention groups in addition to class lessons.

COVID-19 CATCH-UP PROGRAMME

Some pupils will be offered a number of intervention sessions during or after school to address possible misconceptions or gaps in understanding, as a result of disruption to classroom learning in Spring/Summer 2020 and Spring 2021. These will be taught by a teacher, who has a sound understanding of pupil progress and specific areas of need as a result of good communication with the class teacher.

EXTENDING MORE ABLE PUPILS

As outlined in the NCETM materials, teachers will adhere to 'Teaching for mastery': a set of pedagogic practices that keep the class working together on the same topic, whilst at the same time addressing the need for all pupils to master the curriculum and for some to gain greater depth of proficiency and understanding. Challenge is provided, by going deeper, rather than accelerating into new mathematical content. Children who are capable of achieving above age related expectations will be identified from Foundation Stage and on. These children will be monitored, through termly updated class profiles, to ensure experience of the curriculum in depth, in order for them to achieve mastery at greater depth. All children will have access opportunities to engage in a task showing mastery at greater depth. Regular staff CPD ensures that teachers have an understanding of the difference between those achieving mastery and those working with mastery at greater depth.

HOMEWORK

This will be set in accordance with the Homework Policy.

ASSESSMENT, RECORDING AND REPORTING

At Witherley CE Primary School, we are continually assessing our pupils and recording their progress. We see assessment as an integral part of the teaching process and endeavour to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus benefiting the pupils and ensuring progress.

The progress of all children is carefully monitored; children are given regular feedback about their maths. This provides key areas for improvement which teachers use to inform judgements about maths. These are shared with the children and the teacher records progress by highlighting the 'Maths Statements' on Target Tracker.

Teachers will assess children's attainments at the end of the autumn and spring term and formal assessments will also take place using standard assessment maths tests during the summer term. These tests, along with teacher judgements of typical work produced in lessons, indicate children working towards, securing and exceeding age related expectations.

Termly Pupil Progress meetings with the Head teacher and class teacher, enable identification of children who are not achieving age related expectations and the need for intervention is discussed and implemented accordingly. The maths leader will monitor half-termly progress using Target Tracker. Progress is reported and analysed using Target Tracker. Parent/teacher meeting take place twice a year and those children requiring extra support for mathematics either through intervention programmes or Individual Education Plans are reviewed and reported on more frequently.

Written reports are provided for parents at the end of year; these include attainment against age expectations.

MARKING

Work is marked regularly using the schools 'Marking and Feedback Policy' and pupils are given clear guidance on how to improve either verbally or in written format.

EQUALITY

Maths is taught in line with the school's 'Equalities Policy'.

MONITORING AND EVALUATION

Monitoring of the standards of children's work and of quality of teaching in mathematics is the responsibility of the Head Teacher, supported by the subject leaders and governors.

The numeracy subject leader will attend regular network meetings, monitor pupils' books, talk to pupils and observe classroom practice through learning walks. In addition, the work of the subject leader involves supporting colleagues in the teaching of mathematics and informing teachers about current developments in the subject.

GOVERNORS

Governors will monitor the implementation of the maths policy through its Curriculum Committee receiving regular reports on the curriculum from the Head Teacher. Governor visits will also include maths as part of their visits.

Claire Butlin (*Mathematics Subject Leader*)

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To be reviewed Summer 2023