

You are the light of the world, let your light shine.

MATTHEW 5:14-16

Maths Policy

Whaddon Church of England School 2025-2026

This school is committed to safeguarding children and promoting the welfare of children and young people, it expects all staff and volunteers to share this commitment.

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Vision

At Whaddon School we want every member of our school community to shine; personally, academically, and spiritually.

Our vision is upheld by our values, Compassion, Wisdom and Endurance which encompass: forgiveness, kindness, respect, advocacy, justice and courage.

As such, we have high expectations for all of our learners through an ambitious, engaging curriculum and inspiring experiences. These carefully planned and inclusive opportunities not only enable our pupils to be their best selves, but ensure that they are equipped for the next steps in their learning journey and life in 21st Century Britain with a curiosity for learning for life.

We challenge each other, to be our best, through actions, choices and words, so that we can all shine.

Mathematics is all around us. Our role is to enable our children to see this and equip them with the skills and knowledge to reason and calculate mathematically, through a deepening understanding of the world around them. It is important that we develop an appreciation of the wonder and power of mathematics, and a sense of enjoyment and curiosity about this subject in every child. We want Maths to be an enjoyable, challenging and useful subject for all. We believe the journey through the mathematics is as important as the solution, placing a strong emphasis on problem-solving and reasoning, rather than focus only on achieving a correct answer. This promotes a growth mindset towards the subject and a 'can do' belief for all our pupils and the adults supporting them, both at school and home. We seek to provide them with a secure grasp of foundational Mathematical knowledge and skills to equip them for broad and challenging learning across the curriculum, and as useful tools in their adult lives.

Aims

The aims of this policy are to ensure that high expectations of Maths are consistent across the school and that this enables all of our learners to produce work that reflects their high levels of engagement, understanding and skill.

We aim to ensure that all children...

- Develop a secure understanding of the core areas of mathematics including: place value, addition & subtraction, multiplication & division, fractions, geometry, measurements and statistics.
- Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex calculations over time, so that pupils have the mastery of their skills and thus develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Can reason mathematically by following a line of enquiry, conjecturing relationships, making generalisations, and developing an argument, justification or proof using mathematical language.
- Can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking efficient solutions.
- Understand that mathematical skills are essential tools to take into their everyday lives both now and in the future which can also be applied across many areas of their learning in school.
- Enjoy Mathematics, appreciate its breadth and depth, and embrace the challenges of learning it.

Teaching and Learning

We aim for all pupils to achieve Mastery of the subject in demonstrating a high level of proficiency and confidence in all areas of Maths (see below for fuller definition of the Mastery Approach). At Whaddon School we use the White Rose Maths teaching and learning scheme in all classes/year groups across the school to provide consistency,

balance and clear progression of knowledge and skills. Early Years and Key Stage 1 classes also include a short session of Maths Fluency daily. All staff implement the small steps programme which enable pupils to develop a fluency of skills and apply these in problem solving and reasoning in every lesson. Teachers provide all pupils across the school with the manipulatives and pictorial resources needed to fully understand and absorb the content, with the abstract calculation and other written methods introduced at the appropriate age and stage of learning. Mental arithmetic is practised regularly encouraging rapid recall which can then be readily applied to wider problem solving. Stem sentences (structured and rehearsed sentences of maths facts/content) are used at all levels to help children develop their maths vocabulary, structure their reasoning and communicate ideas clearly and precisely. Staff provide appropriate levels of support to pupils who need support to consolidate or close gaps in learning, and offer challenge to those who are working at greater depth by broadening their opportunities for applying their problem solving and reasoning skills. Maths is taught in daily timetabled lessons.

EYFS - In the Early Years Foundation Stage, maths is taught in two sections — Number and Numerical Patterns: Number develops children's early understanding of numbers, including the recognition of numbers, and calculation through practical experiences alongside exposure to symbols. Numerical Patterns develops children's ability to identify and explore patterns in numbers. They will do this both verbally and by using concrete and pictorial representations of the numbers. They will also use and learn the mathematical language needed for types of measure and visual patterns. Learning undertaken within Early Years is guided by the requirements and recommendations set out in the Early Years Foundation Stage document, working towards the 'Early Learning Goals for Mathematical Development.'. We give all children ample opportunity to develop their understanding of mathematics through varied activities that allow them to use, enjoy, explore, practise and talk confidently about different aspects of mathematics as they access the learning environment and interact with staff. Over the course of the Reception year, teachers aim to draw the elements of a daily mathematics lesson together so that by the time children move into Year 1 they are familiar with the format of a focused maths lesson. Evidence of learning is kept in photographs of practical tasks kept in the online learning journal.

Key Stage 1 - The principal focus of mathematics teaching in Key Stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This involves working with numerals, words and the four operations, including with practical resources. At this stage, pupils develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching also involves using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money. Reasoning and problem solving involves application of the various knowledge and skills in all areas of the subject. There are regular opportunities for children to practise and show their fluency, articulate their knowledge of concepts/skills and record their work on paper. The coverage of Maths enables pupils to access the National Curriculum expectations for their year group.

Key Stage 2 — Continuing on from the teaching in Key Stage 1, pupils in Key Stage 2 maintain their confidence and show an improved fluency with whole numbers, place value and counting. The four operations are explored with a greater depth of variety and a wider range of numbers. Pupils will begin to identify, recognise and calculate numbers written in fraction and decimal form. Pupils in Key Stage 2 can recognise and describe the properties of 2D and 3D shapes. Measurement and data handling are also taught to enable pupils to solve problems involving them. Reasoning and problem solving involves application of the various knowledge and skills in all areas of the subject; pupils will increasingly select the method/skill needed to do this independently. They are introduced to more formal ways of recording their work. The coverage of Maths enables pupils to access the National Curriculum expectations for their year group and develop skills for life beyond school.

For further information see our Calculation Policy which outlines how the aspects, methods and skills of arithmetic are taught in year groups, and also our Long and Medium Term Plans providing details of which units and steps are taught in classes. All of these documents are available on the school website.

Mastery

Whole class moves through content at the same pace: When teaching maths for mastery, the whole class* moves through topics at broadly the same pace. Each topic is studied in depth and the teacher does not move to the next stage until all children demonstrate that they have a secure understanding of mathematical concepts. (*In our school, teaching and tasks are adapted to account for mixed aged learners).

Time to think deeply and talk about maths: Students are given time to think deeply about the maths and really understand concepts at a relational level rather than as a set of rules or procedures. This slower pace leads to greater progress because it ensures that students are secure in their understanding and teachers don't need to revisit topics once they've been covered in depth. We recognise that verbalising their thinking supports children in exploring and clarifying their own ideas, ensuring they construct their understanding on solid foundations.

Builds self-confidence in learners: In a traditional primary school maths lesson, children are put in different groups and given different content based on their anticipated ability. This means that from an early age, children are classed as those who can and can't "do maths". Teaching maths for mastery is different because it offers all pupils access to the full maths curriculum. We begin using 'low threshold, high ceiling' word problems to enable all children to achieve at their own level, right at the very start of every lesson. This inclusive approach, and its emphasis on promoting multiple methods of solving a problem, builds self-confidence and resilience in pupils.

Differentiates through depth rather than acceleration: Though the whole class goes through the same content at the same pace, there is still plenty of opportunity for differentiation. Unlike the old model, where advanced learners are accelerated through new content, those pupils who grasp concepts quickly are challenged with rich and sophisticated problems within the topic. Those children who are not sufficiently fluent are provided additional support to consolidate their understanding before moving on.

SEN & Inclusion

Equality of Opportunity and SEND The school is committed to a policy of equal opportunities for all pupils. All children should be allowed access to and given confidence in the different activities offered, regardless of their ability, gender, religion, or cultural/ethnic background. The content of lessons and the resources available should ensure that all pupils are valued equally, are able to participate with enjoyment and are able to achieve qualities and standards appropriate to their age, experience and abilities.

Where a particular learning need is identified, teachers draw up a Special Education Needs provision map for a child. Through targeted teaching and extra 1:1 or small group support, gaps in English skills and knowledge are narrowed.

Resources

Practical, hands-on learning is enabled by ensuring learning areas are well resourced. Maths equipment needed for numeracy and measure are available in all classes; stored in trolleys/drawers for pupils of all ages/stages to access easily during lessons either when planned by staff or when they choose it to help support their learning. Further resources for Space, Shape and Measure can be found in labelled boxes in whole school storage units. Calculators and access to computing software on tablets and laptops are used to enhance aspects of work; adults frequently use interactive whiteboards to present the lesson content and provide modelling of methods of working. Work for Key Stage 1 and 2 is recorded using a blend of prepared sheets and recording in books depending on lesson content. The presentation of number work in squared books is developed through Key stage 1. Early Years pupils will have their Maths recorded in their online Learning Journeys using photos/observations and develop confidence in recorded work over the year. Staff are responsible for informing the Subject Leader or Headteacher when resources run low or if new equipment is needed.

Assessment

Assessment is an integral part of the teaching and learning process.

Daily/Weekly: Adults are expected to give verbal, in-the-moment feedback during lessons to ensure instant impact on the children's understanding and to identify those that need additional support or challenge, so this can be acted on the same day, while the learning is fresh and relevant. Children may be given opportunities to assess their own and each other's' work as part of their development independent learners. Any recorded work is marked in accordance with the school Feedback Policy. The information which we gain from this ongoing, formative assessment is used to inform future planning and differentiation, and to ensure that all pupils are making good progress.

Half-Termly/Termly: Each Unit of Learning in White Rose Maths ends with a short assessment allowing teachers to assess the knowledge and skills developed. Summative teacher assessments measured against National Curriculum levels are recorded for each child termly. This information enables us to see where pupils are on-track to achieve Age Related Expectations, and where additional challenge or support needs to be provided in the terms ahead. Governors monitor this data with staff, and parents are given feedback during termly meetings with class teachers. Any children working below Age Related Expectations within SEN provision will have their targets reviewed in relation to the work planned/covered.

Yearly/Statutory Assessment: Teachers will assess pupils' overall attainment to determine those who are working below, at or above Age Related Expectations and report this information to parents and governors. This will include written assessment papers for Key Stage 1 and 2 children alongside Teacher Assessment data collected throughout the year. In addition to this the following national assessments are carried out according to Government guidelines:

End of Reception Year: Early Learning Goal in EYFS Profile – part of Good Level of Development measures

Year 2: Non-Statutory Key Stage 1 SATS – May

Year 4: Multiplication Check – June

Year 6: Key Stage 2 SATS – May

Monitoring and Leadership

The Subject Leader sets priorities for the development of maths in an action plan which forms part of the School Improvement Plan. Standards are monitored throughout the year and the action plan is annotated to reflect achievements and further development areas. Written subject area reports are produced termly, noting pupil attainment and engagement in Maths, drawing on information from discussions with pupils and staff, lesson observations, looking at planning and evidence from work samples. This report is presented to the Curriculum Governors. The Subject Leader will support the Headteacher in ascertaining priorities for curriculum development, resources and staff training. We welcome input from School Improvement Partners and the local hub groups/advisors in our efforts to develop and improve the teaching, learning and outcomes of Mathematics.

Cultural Capital, Diversity & Equity

At Whaddon School our school vision statement is based on the Bible Verse from Matthew 5:14-16 'You are the light of the world, let your light shine'. We encourage the whole school community to 'shine' brightly in their learning, personal and spiritual lives. Our values of Compassion, Wisdom and Endurance are also encouraged and celebrated in all aspects of school life.

Mathematics specifically provides the opportunity for pupils to demonstrate endurance as they grapple with challenging and apply their learning to new concepts or in different areas of learning. In a broader context, a deeper understanding of Mathematics can help pupils to understand concepts of fairness in how resources and money are used. This could be in practical ways of sharing classroom equipment, raising money for charity or seeking to

navigate local or global news/events. These examples demonstrate how we can seek to develop the values of Compassion and Wisdom in our school community.

We believe that all pupils can benefit from seeing a wide range of role models as Mathematicians, not only staff and parents but in those who have been leaders in Mathematical thinking across history including those from a broad range of cultures and backgrounds. Seeing the role Maths has played in key scientific and technological discoveries also helps children see the Mathematical possibilities in the world around them. In sharing the work and stories of these figures, we enable to children to have an awareness of the importance and impact of the subject, and the potential for its use in future careers. We also use the work of inspirational Mathematicians to show the power and beauty of Mathematics in relation to concepts in areas such as the natural world, time and space. An appreciation of the complexity of these can evoke feelings of awe and wonder, adding a spiritual dimension to Mathematical learning and experiences.

Parent Advice

Parents and carers are encouraged to take an active role in supporting their children's mathematical development. The school website contains Long and Medium Term Maths plans for class for the subject to inform them of the learning taking place during each Term/Learning Unit. In addition to this Class Teachers will provide Homework to develop the maths learning taking place in the classroom; this may be in the form of a practical task to be carried out with parents for Reception and younger Key Stage 1 pupils or by practising skills independently for Key Stage 1 and 2 pupils. This may include online work using apps such as Times Tables Rock Stars. All the information needed for current Learning at Home is put on the Class Pages of the school website; engagement with this enables families/carers to be involved in their child's weekly learning.

In addition to this, staff may offer workshops or signpost support videos/materials to develop awareness of how Maths is taught at school and how families/carers can help pupils at home.