



Intent Statement for Maths

Vision:

At Winslow Church of England School, our vision is '**Let your light shine**'. The rainbow symbolises God's unconditional love for each individual. We seek to reflect that light in all we do: in our community, both local and wider, our communication, both word and action, with curiosity and courage, and with care and compassion for everyone, inspiring a love of learning.

Intent:

At Winslow C of E School, we are committed to ensuring that all children recognise the importance of maths in the wider world and that they develop a sense of enjoyment and curiosity about the subject. We have high expectations for all of our children and we believe that every child can be successful and achieve in Maths. Our aim is that all children become confident, resilient and enthusiastic learners, applying their mathematical skills and knowledge confidently in a range of different contexts. By using a mastery approach, which includes concrete and pictorial representations, we make Maths accessible to all children, challenging the most able and supporting those with SEND, so that all children develop fluency and have a deep understanding of number. The children are given opportunities for reasoning, logical thinking and problem-solving through our maths provision.

Our aims in maths are for children to:

- See themselves as confident mathematicians.
- Take ownership of their Maths learning.
- Be confident in the use of mathematical vocabulary and STEM sentences.
- Use concrete resources to support their learning.
- Use pictorial representations to support their abstract calculations.

At Winslow CE School, our curriculum closely follows the aims of the National Curriculum for Maths 2014 to enable all children to:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and 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 solutions.

Implementation:

We follow the White Rose Maths Schemes of Work, but have the freedom to reorganise the order of topics if needed. Our teaching in maths is underpinned by teacher modelling and the use of accurate mathematical vocabulary. We use PowerPoint slides to support our planning which includes key questions and STEM sentences as well as opportunities to address common misconceptions and challenge.

NCETM Small Steps are also used to support the delivery of Maths with opportunities for Representation, CPA, Variation, Reasoning and Problem solving. Knowledge Organisers are created and shared for each topic.

Maths is taught to all children together; in sustaining our Mastery journey, we employ a keep up, not catch up approach. Adults in the class teach, explain, model and revisit key knowledge, ideas and methods. Children work in Talk Partners (Think, Pair, Share) to discuss and solve problems in an environment in which mistakes are valued. STEM sentences are used for key concepts, and children are asked if they're sure of an answer, even if they're correct.

Marking and feedback

Same day intervention and feedback underpins our approach to ensure all children make good progress and gaps in knowledge and understanding do not emerge or widen. Live marking allows adults to address misconceptions and mistakes as early as possible.

In KS2, marking stations are sometimes employed to enable children to mark their own work and ask for help/further challenge themselves. There are opportunity for children to challenge themselves through choice of task. All pupils self-evaluate, where possible, using the traffic-light system. Scaffolding and feedback codes are used alongside marking sheets for whole class feedback to address misconceptions, plan for future learning and celebrate success.

Communication with parents

Communication with parents occurs mostly on Class Dojo. Examples of good work, rewards and outdoor learning are shared, as well as the flip chart examples on the Working Wall, allowing parents to support their children's learning at home. Word of the week is also shared with parents via dojo to encourage discussions at home. Cracking Times Tables sheets and certificates (KS2) are sent home. Termly overviews are shared on the school website. Parents are informed if homework (or, indeed, classwork) is not completed to the expected standard.

Cross curricular links

Although the maths curriculum is organised into distinct strands, children are encouraged to make connections across mathematical ideas and wherever possible, to apply their mathematical knowledge to science and other subjects. Outdoor learning experiences in maths are encouraged at every opportunity.

Learning Environment and Growth Mindset

Classrooms have a Maths Working Wall, on which can be found materials that will help pupils with that lesson's ideas and knowledge. 'What will help me today?' Most notably, flip chart sheets with modelled examples, and mathematical vocabulary, will be displayed here. Other resources might include sentence starters for reasoning and elements of Knowledge Organisers.

Practical resources such as dienes blocks, cubes and counters are readily available for all the children to use in every lesson.

Homework

In KS2, Maths homework is in the form of MyMaths tasks and Times Tables Rock Stars.

In KS1, MyMaths homework is set each week, correlating with the learning taking place in class. We also encourage children to practise their times tables at home.

Special Educational Needs

All children with SEND remain in the classroom for the duration of Maths lessons and children have opportunities work in mixed-ability talk-pairings. When planning and teaching Maths, staff will make reasonable adjustments to promote equality of opportunity. This could include allocating adult support who provide modelling, clueing, correcting, prompting and self-scaffolding. Pre-learning occurs for some children, along with targeted questioning in class.

Manipulatives are available for use, and pupils are encouraged to use pictorial representations to support their work. For children with special educational needs, tasks may be broken down into small steps, giving children appropriate and achievable goals, and activities should reinforce the pupil's understanding of content covered previously. In this way all children will be enabled to achieve their full potential. Winslow CE School is committed to promoting Disability Equality and equality of opportunity for pupils with learning difficulties.

Lesson plans are adapted to ensure equality of access to all children, modifying tasks where appropriate (e.g. working on the same objectives but with an alternative choice of media, recording work in different ways such as with an iPad or voice recorder - See also 'SEN Policy).

Up-to-date subject knowledge

Our Maths Leads keep up-to-date with new developments and research in Maths (especially Mastery for Maths). We sometimes use Education Endowment Foundation's reports to influence our provision. We are also members of The Enigma Maths Hub and in the sustaining phase of our mastery journey.

Winslow school are currently in the sustaining phase of the mastery journey. We have worked closely with the Enigma Maths Hub to develop our knowledge, understanding and application of Maths Mastery within our school. Maths staff meetings and INSET days have been led by Mastery.

Spiritual

At Winslow, we want children to be enthusiastic about maths and to enjoy exploring new concepts. Our aim is to develop confident mathematicians who believe in themselves and have a growth mindset. Each classroom is a supportive environment where we encourage the children to persevere and be resilient in the face of challenges. We want the children to be curious and to ask questions to deepen their mathematical understanding. Teachers make important links between maths learning in the classroom and how this relates to real life contexts.

Moral

At Winslow School, we want children to have a clear moral compass, enabling them to make good choices. Logical reasoning in maths allows pupils to develop and embed these skills. In every maths lesson, we provide problem solving and reasoning opportunities, where the children can justify and give evidence for their answers. This is transferable to everyday life, supporting the children to confidently express their views.

Social

At Winslow we use a variety of approaches to develop social skills. We believe that many aspects of mathematics require team work and good communication. Talk partners and group activities are consistently used to encourage collaborative thinking and learning. Working walls are used to display collaborative ideas and discussions regarding different methods. There are regular opportunities to share different viewpoints and to have insightful debates when reasoning and solving problems. We want the children to listen thoughtfully, to learn from one another and be supportive of their peers.

Cultural

At Winslow School, we instil an appreciation that mathematics has developed from many different cultures. We believe that Maths is a universal language, its principles and foundations are used all around the world. Cultural diversity is celebrated at Winslow and the historical roots of mathematics are explored. We discover how the number system has evolved over time; counting in the form of tallies and Roman numerals, to how our number system works today.

Impact:

Through our mastery approach to teaching and learning in mathematics we encourage children to 'go deeper' with their learning. As a result, children develop a secure knowledge of mathematical concepts, as well as a fluent and flexible approach when applying their skills to enable them to reason and problem solve effectively. Through our small step approach to building up mathematical skills and ongoing assessment and early intervention, we identify and plug gaps in children's learning so that children make good progress over time from their starting points. This mastery approach to mathematics at Winslow CE School results in:

- Children who participate in an engaging curriculum
- Children who persevere with their learning and are not afraid to 'have a go.'
- Children who are keen to learn and demonstrate positive attitudes towards maths
- Children who notice patterns and seek connections in their learning
- Children who can reason mathematically and are able apply their understanding to solve problems
- Children who are fluent and flexible in their application of mathematical skills

Outcomes

At the end of each year, we expect the children to have achieved Age Related Expectations (ARE) for their year group. Some children will have progressed further and achieved greater depth (GDS). Children who have gaps in their knowledge receive appropriate support and intervention.