



Intent, Implementation and Impact

Intent	Implementation	Impact
<p>At Pyrford, we know that mathematics is a creative and highly inter-connected discipline vital to everyday life and necessary for financial literacy and most forms of employment. It opens the doors to a variety of fields such as science, engineering, architecture, medicine and business.</p> <p>Our aim is to ensure that pupils acquire core mathematical knowledge which will allow them to experience success and foster an association of mathematics with enjoyment, creativity and motivation.</p> <p>We have high expectations of all children and we encourage them to challenge themselves, show resilience and pursue success in order to become competent and confident in their use of mathematics beyond the classroom.</p> <p>In addition, our aim is for all our children to:</p>	<p>We follow a mastery approach, from the Early Years Foundation Stage through to transition to KS3, where our children are taught a mathematical concept in depth, moving through small progressive steps to develop a deep, lasting understanding and competence. Place value is the foundation of our number system and every year group revisits this number strand before moving onto calculation and other mathematics strands including measure, fractions and geometry.</p> <p>Daily recall tasks are included to help develop our children’s fluency in arithmetic and embed and reinforce their understanding of mathematical methods. Rather than having to rely on derivation or guessing, we help pupils to develop ‘automatic recall’ of key concepts to prevent their working memory from becoming overloaded. Problem solving and reasoning tasks are also supported by automaticity of facts, enabling children to draw on and make links with previous learning in order to solve more challenging age appropriate tasks.</p> <p>Teaching methods in mathematics today are very different from how many adults were taught and we help the children understand the “why” rather than just show them “how” by using guidance from professional sources including (but not only) the NCETM, our local Maths Hub mastery specialists WRM and the OFSTED Mathematics Research Review May 2021.</p> <p>A rich mathematical vocabulary is taught throughout the year groups and the children are shown how to explain their reasoning and articulate their understanding of the “why”. In this way, the children can learn from one another in a collaborative and safe environment whilst developing resilience in their own learning and respect for the ideas and learning of their peers.</p>	<p>Attainment in mathematics is measured using the statutory assessments at the end of Key Stage One and Two. These results are measured against the mathematical attainment of children nationally.</p> <p>By the end of KS2 we expect our children to calculate efficiently with understanding and competency at an age appropriate level in readiness for secondary school and to understand, and have confidence in, other mathematical strands including fractions, algebra, measures and geometry.</p> <p>The school measures impact through:</p> <ul style="list-style-type: none"> ➤ Assessment of Early Learning Goals in Number and Numerical Patterns ➤ End of KS1 and KS2 Statutory Assessments ➤ The Statutory Multiplication Check in Summer term of Year 4 ➤ Mathematics assessments (Rising Stars tests termly) ➤ The Ready to Progress Framework assessment guidance (used to plan appropriate starting points for each new concept/block of teaching) ➤ End of block assessments using the White Rose Maths Framework ➤ Pupil asset is used to analyse gaps in children’s knowledge and gain an overview of specific groups of children across school. ➤ Monitoring (learning walks, pupil voice, book looks, teachers’ planning and professional dialogue with teaching and support staff) to assess learning

- Be independent, confident and enquiring mathematicians.
- Have a positive attitude towards mathematics and a confidence to give it a go and develop resilience.
- Have a developed mathematical vocabulary beyond that used in everyday speech.

and attitudes towards mathematics. This monitoring informs next steps for the children whilst ensuring consistency in planning and teaching schoolwide and areas of need for staff development.