



MATHS

INTENT

At Tooting Primary, our intent for Mathematics across the school is that ‘all *children can learn and master Maths*’. We ensure that Maths is a pivotal part of our everyday lives, where the children learn life skills such as telling the time and using money. As a school, we aim to promote a life-long love for Mathematics and for children to feel confident in their arithmetic skills, their ability to reason mathematically and enthusiastic in exploring Maths in real-life problems across a range of contexts. Deepening their understanding of Maths, will allow pupils to better understand the impact of Maths on the world around them. Tooting Primary School’s Maths Curriculum is designed to excite and enthuse learners, whilst challenging them to take risks in their learning with an emphasis placed on the value of mistakes as we move towards mastery in Maths. The children are able to become creative with deepening their knowledge and apply their skills in a range of ways. The children will build their resilience, develop their confidence and skills for enquiry as they are encouraged to think deeply and question their learning. We firmly believe that every child is a Mathematician and through supportive, engaging and creative teaching staff strive to support children to realise this quality in themselves. We provide adaptations to the learning, where applicable, to ensure that learning is accessible for all. We endeavour to use and employ maths, across our taught curriculum in order to reinforce its importance in all of our learning and everyday life. The curriculum is designed with the aim to create a positive and inclusive learning environment where all pupils, regardless of their starting points or abilities, can experience success and make progress. The subject areas are taught through microscopic steps in a logical and systematic way, progressively building on pupil knowledge.

IMPLEMENTATION

Our motto for maths is “*We go slow to accelerate progress*” so that we are able to support confident mathematicians. To ensure consistency and progression across the school, TPS follows the *White Rose* scheme of learning in line with the National Curriculum. Maths lessons are carefully planned and sequenced, with a logical and systematic progression of skills that sees new knowledge introduced and built upon prior learning. In EYFS, the children following Mastering Number by NCTEM, which is devised to support the learning of number and counting, which is taught 4 times a week. The children are then taught a lesson patterns, shapes and measurements for the 5th lesson and this is also incorporated in the provision to ensure that curriculum is met. KS1 teaches Mastering Number four times a week as an additional support with Mathematics. This project aims to secure firm foundations in the development of good number sense for all children. Over time, it ensures that children will leave KS1 with fluency in calculation and a confidence and flexibility with number.

High quality teaching

Teachers deliver high-quality Maths lessons that are engaging, well-structured, and challenging. All lessons incorporate fluency, reasoning and problem solving, to ensure that children are able to build upon their knowledge and apply it in a range of ways. Their subject knowledge is secure and employs a variety of teaching strategies and adaptations to cater to the learning needs and styles of all pupils. Lessons incorporate a variety of concrete manipulatives to support pupils in establishing a strong foundation before moving on to abstract concepts. Children are taught and encouraged to use appropriate mathematical vocabulary, when discussing methods, problem solving or reasoning in Maths. Scaffolded support is provided to help pupils make connections between mathematical concepts and real-life applications. Teachers are guided by the school's calculation policy, which emphasises the importance of Concrete, Pictorial and Abstract approaches in ensuring that pupils can make connections between different representations. Classrooms are well resourced with a range of manipulatives, visual aids, and contextual materials to enhance learning experiences. Collaboration and peer discussion are used regularly to deepen pupil understanding, whilst encouraging the development of resilience, perseverance, and problem-solving skills. This enables pupils to tackle complex mathematical challenges with confidence. This includes our children from the base, many of whom access maths in the mainstream classes as part of their personalised programme of intervention.

EYFS

Our young mathematicians in EYFS, are provided with exciting opportunities to develop their early numeracy skills through purposeful play and mixture of adult-led and child-initiated activities. Children are supported in developing their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, space, and measure. The use of manipulatives is fundamental in EYFS, in supporting pupils to bridge their experiences from the abstract to the tangible. It is our belief that continuous exposure to meaningful experiences and real-life problem solving, will benefit our children by developing a strong foundation on which to build their Maths journey.

Mastery

Achieving mastery of a skill, requires pupils to learn more and remember more. With this in mind, we deliver new concepts to the children slowly - ensuring that they master necessary skills before moving on to new content. The mastery approach adopted at Tooting Primary School, supports a deep and sustainable understanding of maths, where concrete materials, pictorial representations and symbols are used to support children. Children are encouraged to dive deeper into their learning by applying their mathematical knowledge in creative ways, to promote ownership over their learning. Problem solving is at the very core of our maths lessons, after all, the ability to use and apply maths is fundamental to everyday life, both in childhood and adulthood. We ensure that the children are exposed to familiar and unfamiliar problems to develop their confidence and ability to choose relevant strategies. We believe that children should be encouraged to think analytically and creatively. Teachers facilitate discussion through rich, open-ended questioning, which promotes higher-order thinking, reasoning and explanation. The ability to articulate ideas and processes, consolidates children's learning and develops their ability to raise questions of their own.

Closing the attainment gap By implementing the White Rose scheme at TPS, it has allowed us to focus on differentiation and individualised support, we have seen a significant impact on closing the attainment gaps among targeted groups within our school community. Pupils from different backgrounds and starting points are provided with tailored interventions and opportunities to access support Assessment and Feedback Formative assessment plays a key role in understanding pupil progress and informing teaching. Teachers use a range of strategies, such as questioning, observation and live marking to gather evidence of pupil understanding. This information is used to adapt lessons, identify misconceptions, and inform decisions around interventions. Feedback is constructive, specific and focused on next steps. Teachers provide oral and written feedback which supports pupils' individual development and encourages them to reflect on their learning. Bi-termly assessments also take place, and alongside teacher judgement inform our termly data analysis. With fluency from Year 1-6, children are provided with opportunity to self-assess their learning at the end of the lesson - this promotes communication and understanding to answer questions and correct misconceptions where necessary.
IMPACT The impact of the Maths curriculum is evident across the school, as reflected in pupils' engagement and their attitudes towards Mathematics. The provision enables pupils to achieve high standards and make good progress. They will have an inquisitive mindset, where they are able to make connections across subject areas and apply this to the real world. Pupils will be confident with mathematical concepts and will have an interest in self-improvement when continuing to develop their knowledge in Maths. When faced with mathematical problems, we aim for pupils to have the tools and models needed in order to face challenges with increased independence. Pupils are able to learn from mistakes and continue to build their resilience from doing so, as reflective Mathematicians. Outside of their Maths lessons, pupils will be able to demonstrate their mathematical understanding across the curriculum, such as in the subjects Science, Geography, Art or Design and Technology, and use their knowledge to solve problems as well as use their skills of reasoning to explain their methodology. Parents and Carers are actively involved in their child's mathematical development, through regular communication, workshops and resources to support learning at home. This will all support the children to develop a lifelong love of Maths and be successful in the next stages of their lives.