



SIR ROBERT GEFFERY'S PRIMARY SCHOOL

A School for Enthusiasts

Where we 'live life in its fullness' (John 10.10)

Knowing that God is our strength and with

His help we will be the best we can

Mathematics Intent, Implementation and Impact

Intent

At Sir Robert Geffery's School, we take a mastery approach to the teaching and learning of mathematics and approach maths with a 'Growth Mindset'. Our aim is for all children to enjoy mathematics and have a secure and deep understanding of fundamental mathematical concepts and procedures when they leave us. We want children to see the mathematics that surrounds them every day and use our extensive school grounds to enable children to enjoy developing vital life skills in this subject. We aim to inspire all of our pupils, irrespective of their ability, to reach their full academic potential. We recognise that mathematics is a critical area of skill and knowledge that impacts on the quality of the lives we lead.

We aim to deliver an inspiring and engaging mathematics curriculum through high quality teaching. Children are encouraged to be brave and push the boundaries, deepening their understanding further. In order to improve our mastery approach and improve the quality of our maths teaching, we have implemented the Rising Stars scheme of learning as our medium term plan. However, we also use material from White Rose, NCETM, The DfE 'Ready to Progress' materials, NRich and CGP as our core resources. In addition to this, our Maths Lead is currently working with the Cornwall Maths Mastery Hub to further develop their understanding and to further support and embed the mastery approach into our school.

Implementation

Maths is typically learnt in discrete lessons, but also, wherever possible, we make meaningful cross-curricular links so that pupils can see how maths knowledge and skills can be used in wider contexts – particularly the STEM (Science, Technology, Engineering and Maths) subjects. When children can use and apply their maths skills in a real situation, they are more engaged, excited and motivated to learn and develop as mathematicians. Lessons follow a clearly structured and well-sequenced teaching and learning process that helps us make certain that every child masters each maths concept securely and deeply. For each year group, the curriculum is broken down into core concepts, taught in units. A unit divides into smaller learning steps – lessons. Step by step, strong foundations of cumulative knowledge and understanding are built. Where possible, it sees all children learning the same concept, each finding and mastering challenge at their own level within their year group. However, we recognise that some learners are ready for more challenges

in their Maths and to this end we set across our four Key Stage 2 classes; creating 5 distinct groups (a Year 3 group, a mixed Year 3&4 group, a mixed Year 4&5 group, a mixed Year 5&6 group and a Year 6 group. Our curriculum builds on the concrete, pictorial, abstract approach (CPA). By using all three, the children can explore and demonstrate their mathematical learning. Together, these elements help to cement knowledge so children truly understand what they have learnt. High quality resources are used to support, stretch and challenge all children within the classroom providing them with opportunities to reason and problem-solve. In addition, the school's calculation policy is used to ensure a coherent approach to teaching the operations across our school. In addition to this, we employ maths jotters where children are free to explore mathematical challenges, record fluency and the results of maths investigations.

Manipulatives are essential resources for both key stages and our core resources encourage children to use these at every opportunity; continuing the Concrete-Pictorial-Abstract approach right through from EYFS to Year 6.

This maths teaching is enhanced by daily arithmetic practice in the form of 'Daily 10', TT Rockstars, Corbett Maths 5 a-day' providing children with the opportunity to recap and ensure essential skills are regularly revisited and retrieved to strengthen retention.

In instances where children have not understood a concept, we employ a 'Same Day Intervention' model. This model is designed to enable pupils to "keep up" not "catch up". Teachers mark pupils' work during the lesson or soon after so that pupils who need extra support get it the same day, enabling them to keep up. For those children that have more significant gaps in their learning, we employ pre-teach and post teach intervention materials in small, adult-led groups. This approach utilises concrete resources and short, progressive sessions to enable children to understand key concepts. In addition to this, at Sir Robert Geffery's we embrace what technology can offer our maths teaching and use a number of online learning platforms; TT Rockstars, Mathletics, MyMaths, IDL and Purple Mash.

Impact

Summative assessment takes place at the end of each unit Rising Stars and Headstart standardised tests are administered termly and at the end of blocks of work to assess progress for years 1-6. In addition to this, National Curriculum tests are used at the end of KS1 and 2 and the MTC in Year 4; teachers use past and sample papers to inform their assessments as they prepare pupils for these end of year assessments. Teachers use the results of ongoing summative assessments to identify common errors/ misconceptions to inform next steps in teaching and learning. Children's progress and attainment are discussed by teachers and SLT termly as part of termly Pupil Progress meetings.

Formative assessment takes place on a daily basis and teachers adjust planning accordingly to meet the needs of all pupils in their class. In addition, we place a strong emphasis on the power of questioning: this enables us both to explore topics together as a class as well as verbally develop reasoning skills during our lessons. Children are encouraged to take ownership of their learning through self- and peer- assessment and learning coach activities. Leaders monitor the effectiveness of teaching frequently through lesson observations, book scrutinies and pupil conferencing.