



Maths

LAST REVIEWED:

Governor Ratification:

Date of next review:

St. John's Walham Green Church of England Primary School is an exciting Christian school where everyone flourishes. We celebrate difference: learning from each other, we grow into our best selves. We enjoy the adventure, challenging each other through learning and play. We rejoice with our church and community, building for a better world. Confident in ourselves, we thrive together in care and love.

EQUAL OPPORTUNITIES STATEMENT

St John's School is committed to the principle of equal opportunity for all pupils irrespective of race, religion, gender, language, disability or family background. We believe that equal opportunity is at the heart of good educational practice and challenge any form of discrimination. All staff and governors are responsible for ensuring that we implement this policy.

Introduction

This document will explain the way Maths is taught in St John's Walham Green C of E Primary School. It will explain the Maths curriculum intent, implementation and impact as well as provide a rationale for the curriculum and its progression across year groups.

Courage: Pupils become more resilient when attempting to understand new concepts and have the confidence to try and make a mistake.

Wisdom: Pupils gain the wisdom to understand how maths can be applied to everyday life.

Compassion: pupils learn to accept challenges faced by others and where they are taught predominantly as a whole class, children are taught the value of working together.

Intent:

At St. John's Walham Green we aim to equip all learners with the skills and knowledge to enjoy and succeed in mathematics. Our intent, alongside, the National Curriculum highlights the importance of **mathematical fluency, mathematical reasoning and problem solving**. We consequently follow a scheme that values the 5 core principles of mastery: coherence, fluency, representation & structure, variation and mathematical thinking, one that ultimately aims to be accessible and inclusive for all learners. We intend to deliver a curriculum that is designed cumulatively and provides children with a deep conceptual understanding that is then built upon throughout their education. Through questioning we aim to develop the children's ability to communicate and reason using precise

mathematical language while inspiring children to become confident mathematical thinkers. We understand that maths goes beyond the classroom and is a fundamental part of everyday life, essential in technology, science and critical to one's financial literacy. We therefore value the importance of cross curricular links, learning practically and learning outside where possible. We intend for all learners to leave school equipped with a curiosity and understanding of mathematics that is relevant and useful in their future studies and careers.

Implementation:

At St. John's Walham Green we implement our maths curriculum by following a scheme called Mathematics Mastery. Our curriculum provides a thoughtfully designed and cumulative approach to delivering maths that allows children to revisit, build upon and in turn deepen their understanding of a specific concept throughout their time at school. Our curriculum highlights the importance of discussion, specifically the importance of mathematical vocabulary. Encouraging and modelling this is embedded into our teaching to support mathematical thinking. We value the importance of practical based investigation as well as paper based worksheets and so plan accordingly to balance this. As well as the daily lessons, we are aware of the importance of consistency and repetition and so we conduct maths meetings throughout the school that cover concepts regularly. Our curriculum recognises the importance of mathematical fluency and children are encouraged to retain number facts in order to understand more complex maths problems as they move throughout the school. To support this children take part in weekly competitions to assess their fluency.

Impact:

At St. John's Walham Green, we evaluate the impact of our maths curriculum through a range of formative and summative assessment strategies. Teachers have a very good understanding of their children and of formative assessment and use this to gauge a clear idea of the children's learning throughout a lesson. This knowledge is used to guide teachers on what to cover in subsequent maths meetings and interventions. The Maths subject leader and the members of the SLT monitor the impact of the teaching of the curriculum. This is evaluated through lesson observations, book scrutinies, planning evaluations, use of pupil voice, governor visits and careful and continuous analysis of the assessment data. Throughout the year we do three formal assessment weeks to summatively assess core learning. The data drawn from these is analysed by the maths lead and relevant teachers and interventions are planned and reviewed based on this data. Our curriculum ensures children have a deep and meaningful understanding of maths which allows them to be challenged further.

Rationale:

The progression of our curriculum is well thought out and carefully considers the age of pupils.

EYFS:

A fundamental principle of Maths Mastery is the belief that a deep and lasting understanding of procedures and concepts is the key to success. We believe children are most likely to reach their potential when this is developed early on. The rationale behind using a cumulative approach for teaching mathematics, one that begins in the EYFS is that it allows all children, regardless of background, to succeed in mathematics. By providing children in the EYFS with strong mathematical foundations, in a way that is engaging and appropriate for their age, we are allowing them the opportunity to acquire a solid understanding to move on to more advanced material. The EYFS states children should be provided with a holistic, safe and stimulating environment that allows them to reach their full potential. Our maths curriculum follows a structure whereby children are encouraged to talk and explore new concepts using practical and varied representations allowing teachers the freedom to deliver a child led curriculum. Throughout nursery and reception children are exposed to a numbers rich environment whereby mathematical language is encouraged in their every-day play and learning. The children's learning is developed through thoughtful and well-designed table top activities throughout their day.

KS1

At St. John's Walham Green the maths curriculum in Key stage one aims to build upon the concepts explored in the EYFS providing children with a range of strategies to solve more complex mathematical problems. The rationale for our curriculum, alongside the National Curriculum is that 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. At St. John's a primary focus is to ensure all children leave year two fluent in known facts to 100. A secure understanding of number bonds allows for a deeper understanding of more complex arithmetic taught in key stage two. In key stage one maths is predominantly taught through a CPA approach (concrete, pictorial, abstract). The thoughtful use of practical manipulatives is used throughout the year to support understanding and avoid rote repetition of meaningless memorised procedures. Concrete and pictorial representations support with the development of a deep conceptual understanding. The fundamental principle of teaching for mastery is to narrow the gap and ensure all children can succeed in mathematics. Where differentiation is required, based upon teacher judgement, it is provided, however we aim to teach the whole class together.

KS2

By the time children move into KS2 they should have a deep and consolidated understanding of the basic mathematical principles, ready to move onto more advanced material. By now children should have the resilience to challenge themselves and make systematic choices when problem solving. A maths lesson in KS2 builds on all of the children's previous learning whilst moving onto more complex vocabulary and concepts. The use of practical manipulatives is encouraged to further the development of a deep and meaningful understanding of maths. Maths meetings are delivered three times a week with the same purpose, to ensure consistency and repetition. The curriculum continues to cultivate links between maths lessons and the children's future cultural capital, preparing them with financial literacy and reasoning skills.