



ST. ANNE'S C.E.(VC) PRIMARY SCHOOL

Mathematics Curriculum Statement

'Together with God, Making Learning a Life Long Friend'

Context and Rationale:

Our intention is that pupils become fluent in the basics of mathematics, reason mathematically and can solve problems by applying their mathematics.

The programmes of study are organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

Our Approach:

The design of our curriculum has been developed and refined over the years by successive Maths Leads to meet the changing needs of our school. In previous years, we followed Abacus as a single scheme for the whole school, followed by a period in which we used Maths No Problem for Key Stage 1 and a mixture of schemes for Key Stage 2, and then we had a trial period during 2021 of the Power Maths scheme. Following this trial, we found that none of these approaches offered us the depth of curriculum or opportunity to develop high levels of fluency that our children needed.

In Reception, as the class is part of the Foundation Stage of the National Curriculum, we relate the mathematical aspects of the children's work to the objectives set out in the Early Learning Goals, which underpin the curriculum planning for children aged three to five. We give all the children ample opportunity to develop their understanding of number, measurement, pattern, shape and space through varied activities that allow them to enjoy, explore, practise and talk

confidently about mathematics as part of their continuous provision. We use the Number Sense approach to develop fluency, flexibility and good number sense which builds an automaticity of facts.

Key Stages 1 and 2 both follow White Rose as a framework to ensure consistency, progression and coverage through the school, however in Key Stage 1 we have opted to do so through the use of the Primary Stars scheme as we feel this is more aligned with our Concrete-Pictorial-Abstract approach in the way that concepts are introduced through concrete materials and then pictures to represent them before children move on to abstract notation. This scheme is closely linked to White Rose, so consistency of coverage is maintained. Years 1 and 2 also use the Fluency Bee teaching programme in order to build on the foundations laid in Reception with structured, varied and frequent practice.

In Key Stage 2, staff use the White Rose scheme of planning and resources to ensure consistency, progression and coverage. Additional resources to support fluency, problem-solving and reasoning development are accessed via NRIC and NCETM, as well as tools such as MathsBot. We have also recently implemented Gareth Metcalfe's *I See Problem-Solving* resources, and have developed our own series of deepening questions to present to those higher attainers who need to dig deeper into their problem-solving capacities, which are stuck in the backs of maths books for children to access as appropriate. Pupils make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems and apply their mathematical knowledge to science, computing and other subjects.

Pandemic Disruption:

During the COVID-19 lockdowns, our children faced an unprecedented disruption to their whole lives, not just their education. While during lockdown we all worked tirelessly to provide the children with the best opportunity to access their entitlement to a broad and balanced curriculum, individual circumstances meant that there was a wide variance in how this curriculum was accessed across different sections of our community as families did their best under sometimes very challenging conditions.

In order to address this in maths, during the lockdowns all classes sent home daily maths activities for children to complete. Following this, in order to address the imbalance caused by the aforementioned wide variance in access to and engagement with these activities, we used documents provided by the DfE to assess gaps and ascertain what core learning children needed at the end of each year, in order to adapt our teaching and ensure we were supporting the children with exactly what they needed most. We then proceeded to allocate a lot of our National Tutor Programme funding into maths to ensure gaps were addressed in our ongoing teaching approach following the end of the lockdowns.

Outcomes:

Assessment is an integral and continuous part of the teaching and learning process at St Anne's and much of it is done informally as part of each teacher's day-to-day work. Teachers integrate the use of **formative assessment** strategies such as: effective questioning, clear learning objectives, step-by-step modelling with participation from the children, effective feedback and response in their teaching and marking, and guiding and observing children participating in activities.

Findings from these summary judgements are recorded on an assessment grid of year based objectives using four levels of attainment. These judgements are discussed at termly pupil progress meetings alongside the summative assessment results. Staff have the opportunity to regularly assess and moderate their judgments with a colleague at staff meetings and at least once a year with teachers from another school.

Summative assessment takes the form of more formal methods are used to determine the levels of achievement of children on a termly basis (and more often in Year 6). We use termly assessments as a way of recording children's progress. These test results alongside the teacher summary judgements are analysed termly to determine whether extra intervention or modification to teaching is required. In addition to Statutory End of Key Stage Assessment at year 2 and year 6, other year groups sit an Optional SAT paper. Teachers also have access to White Rose's end of unit checks which provide a more frequent assessment opportunity.

In Year 4, children undergo the Multiplication Tables Check in the summer term, so in order to ensure readiness for this and retention of the fundamental skill of rapidly recalling times tables (and associated multiplication and division facts), Year 4 children take a weekly summative 5-minute times tables progress test which assesses their progress made through explicit teaching of times tables as well as daily "speed tests", where children focus on one times table per week for 2 minutes a day to reinforce their learning as a lesson starter.

Last reviewed: Autumn 2024 by J. Nixon