



'We are mathematicians' ~ our mathematics curriculum delivers a true mastery of maths through rich experiences which build confident fluency, logical reasoning and effective problem solving skills. This is coupled with a progression of language to articulate understanding and reasoning clearly and confidently.

This policy will be reviewed in September 2026.

The National Curriculum has three aims that are at the heart of our provision:
Pupils will become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems;
Pupils will reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language;
Pupils will solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Curriculum Intent

At St Thomas á Becket School, our intent is to deliver a mathematics curriculum which develops:

- positive attitudes towards the subject and awareness of the relevance of mathematics in the real world
- competence and confidence in using and applying mathematical knowledge, concepts and skills
- an ability to solve problems, to reason, to think logically and to work systematically and accurately
- opportunities to make rich connections across mathematical ideas to develop fluency through small steps, mathematical reasoning and competence
- initiative and motivation to work both independently and in collaboration with others in a variety of settings
- confident communication of mathematical concepts where pupils ask and answer questions, openly share work and learn from mistakes
- an ability to use and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and investigation
- a stimulating and exciting learning environment, which uses appropriate resources to maximize the impact of teaching and learning.



Curriculum Implementation

Teaching and Learning:

The curriculum is delivered through the implementation of 'The 2014 National Curriculum' in both discrete lessons and through other subject areas where appropriate.

During a normal week, maths is taught for 5 sessions per week, which last between 45 and 60 minutes. This time will vary according to age group.

Small Steps

Lessons are broken down into small connected steps that gradually unfold the concept, providing access for all children and leading to the ability to apply the concept to a range of contexts.

Representation and Structure

Representations used in lessons expose the mathematical structure being taught, the aim being that students can do the math's without recourse to the representation. Manipulatives provide a temporary scaffold to embed understanding, and are withdrawn to facilitate independent thinking.

Mathematical Thinking

To foster a deeper understanding of concepts. New ideas must not merely be passively received but thought about by each child, reasoned with and discussed with others.

Fluency

Quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics.

Variation

Variation is twofold. It is firstly about how the teacher represents the concept being taught, often in more than one way, to draw attention to critical aspects, and to develop deep and holistic understanding. It is also about the sequencing of the episodes, activities and exercises used within a lesson and follow up practice, paying attention to what is kept the same and what changes, to connect the mathematics and draw attention to mathematical relationships and structure.

Through Quality First Teaching, 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 are based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly are challenged through rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material are given opportunities to consolidate their understanding through additional practice before moving on. Pupils who need extra support will be given opportunities for over-learning and intervention sessions to consolidate and practise skills.

Our Early Years curriculum is based around the NCETM's Mastering Number programme and is supplemented by White Rose for Shape, Space and Measure. This ensures that children are working towards the Early Learning Goals for Mathematics. Children have a short Maths lesson every day and taught concepts are reinforced and revisited through continuous provision.



In addition to Maths teaching, separate **arithmetic sessions** are delivered four times a week to support the over-learning of key number facts, build fluency with addition, subtraction, multiplication, division and fractions, as well as practice mathematical vocabulary and stem sentences. This varies between classes to support the development and needs of the different year groups:

- **EYFS/** Flashback to prior learning, Mastering Number and deliberate activities in **KS1:** continuous provision.
- **LKS2:** Arithmetic Ninja, Maths Meetings, times table fluency sessions, flashback to prior learning.
- **UKS2:** Arithmetic Ninja, Maths Meetings, times table fluency sessions, flashback to prior learning.

Weekly planning:

As in all areas of the curriculum, teachers are expected to use the EQUA Mead Essentials to deliver quality first teaching. This involves considering the needs of all pupils to raise attainment levels and provide lessons which can be accessed by all through:

- Behaviour and Engagement
- Explicit Instruction
- Adaptive Teaching
- Modelling
- Independent Application
- Assessment and Feedback

Our curriculum follows the White Rose planning scheme of work through their small steps. This can be flexible to allow teachers to teach similar objectives where appropriate. Lessons are planned weekly using White Rose as a starting point, with the expectation of tailoring the lesson slides to meet the needs of the class. Lessons follow our 'revisit, teach, practice, apply' structure. Every Maths lesson begins with an opportunity for children to revisit their prior knowledge. This then leads into the explicit teaching of a new concept, before children have the opportunity to practice this guided by the teacher. This is likely to follow the 'I do, we do, you do' structure and may be repeated multiple times within the lesson. Pupils will then apply their new knowledge independently. Formative assessment and flexible grouping should be used to determine when children are 'ready' to access the independent task; some children may need multiple repetitions of the teach and practice lesson phases.

The Calculation Policy follows the Concrete, Pictorial, Abstract approach which is carefully planned to ensure consistency and clear progression. Manipulatives are used in all classes to demonstrate concepts, and removed as a scaffold once children have a good understanding.

Misconceptions should be addressed during lessons and sufficient time provided to allow pupils to consolidate a deep understanding of each concept with a carefully sequenced journey through the learning.

Mastery is embedded in all teaching to provide the children with rich opportunities to deepen their learning and make connections through a range of reasoning and problem-solving tasks. This



involves the use reasoning sentences and vocabulary which progresses across each year group, with either verbal or written responses.

Lessons should be interactive, engaging and structured to enable all children to make effective progress. The majority of pupils will be moving through the curriculum at the same pace; however, it is expected that planning will provide for those with exceptional Special Educational Needs and challenge those working at greater depth.

The role of Teaching Assistants:

Teaching Assistants need to know the teacher's objectives for the children's mathematics learning and the learning objectives that have been set for individuals or groups of children.

Teaching Assistants may take focus groups, observe, join in children's play, support groups or individuals and provide valuable feedback to the teacher. They are expected to use maths vocabulary and the mastery CPA approach, and to be consistent with methods taught.

Teaching Assistants are also advised to give children verbal feedback and encouragement as well as indicate that they have supported a child in their books. (See Feedback and Marking Policy).

Where separate interventions are necessary, Teaching Assistants should be given relevant training and support to deliver sessions effectively. They should discuss planning and pupil progress teachers to assess progress and next steps.

Resources:

Each classroom is equipped with a range of suitable manipulatives to support planned mastery lessons. These progress throughout the school as outlined in the Calculations Policy.

Working Walls:

Teachers are encouraged to create a suitable working wall which displays new concepts, vocabulary and stem sentences to refer to and support all learners. These should evolve with each unit.

Leadership, Assessment and Feedback

We are continually assessing our pupils and recording their progress as an integral part of the teaching process and endeavour to make our assessment purposeful, allowing us to match the correct level of work to the needs of the pupils, thus benefiting the pupils and ensuring progress. Assessment takes place at three connected levels: short term, medium term and long term. These assessments are used to inform teaching in a continuous cycle of planning, teaching and assessment.

Short Term Assessment:

Continual teacher assessment is an integral part of First Quality Teaching. This informal process allows teachers to understanding, address misconceptions, further understanding through deeper questioning, and adjust lesson plans accordingly.



From Y1-Y6, 'end of block' assessments are used by teachers to assess pupil's understanding at the end of each block of White Rose Maths. This allows teachers to identify where children may need more support and also allows the Maths subject leader to adapt the curriculum if trends are observed.

In each lesson teachers and teaching assistants will use live marking and verbal feedback.

Self –assessment: pupils are encouraged to assess their own work by writing 1, 2, or 3 ticks in purple pens. This might also include using thumbs to visually assess the whole class.

Medium Term Assessment:

This takes place three times a year at the end of each full term using the White Rose summative assessments: their results lead to discussions in termly Pupil Progress Meetings and we report to parents in the end of year report. Gap analysis of any tests that the children complete is undertaken using the Smartgrade tool and fed into future planning to provide the bespoke learning approach which we prioritise. Data is submitted onto Insight so that children's attainment and progress can be tracked over time. Year 6s will complete SATs practice papers for their assessments.

Year 4s will complete the Official Unofficial Multiplication Tables Check on Times Table Rockstars three times a year, with results recorded on Insight, alongside a monthly Soundcheck on Times Table Rockstars. The Year 4 teacher then uses this data to plan and adapt the times tables curriculum for the class as well as individual support for children with gaps in their knowledge.

Class teachers will identify children who are below age-related expectations (ARE) and will be discussed during Pupil Progress meetings. Interventions will be planned and implemented as a result of the meetings and recorded on a Raising Attainment Plan.

Long Term Assessment:

These take place towards the end of the academic year to assess and review pupils' progress and attainment. These are made through compulsory National Curriculum Mathematics SATs test for Year 6 and Year 4s will sit the Multiplication Times Tables Check (MTC).

Teachers will also draw on their class's individual learning objectives records and knowledge about each pupil to produce a summative record i.e. end of year report. This report will be produced for parents and discussed with the pupil's next teacher as part of the transition process.

Marking:

Live marking and verbal feedback is used in each lesson. The learning objective will be ticked up to 3 times to indicate pupil attainment according to the schools 'Marking Policy'.

Special Education Needs

Children who require additional support are identified on both the year groups' provision maps and the teachers' planning. Needs for these children are met through differentiated activities and adult support when appropriate. This can take place both during the lesson and through additional intervention. Where possible, all children will access the relevant Year Group lessons, with support.



Within the mathematics lessons teachers not only provide activities to support children who find mathematics challenging but also activities that provide appropriate challenges for children who are high achievers in mathematics.

Monitoring and Evaluation

Monitoring of the standards of children's work and of quality of teaching in mathematics is the responsibility of the SLT, supported by the subject leaders and governors.

The Subject Leader will: monitor pupil data and progress, monitor pupils' books, talk to pupils, observe classroom practice and attend regular network meetings. In addition, the work of the subject leader involves supporting colleagues in the teaching of mathematics and informing teachers about current developments in the subject.

Governors

Governors monitor the implementation of the maths policy and teaching through tri-annual meetings with the Subject Leader and Head Teacher.

Curriculum Impact

At St Thomas á Becket School, our mastery approach will encourage a love of mathematics through engaging lessons, verbal dialogue and written work and help children understand that mathematics is everywhere in the real world.

Our children will:

- be enthusiastic learners showing resilience, perseverance, curiosity and confidence
- demonstrate a quick recall of number facts and methods
- be confident to look for patterns, use logical reasoning, suggest solutions and explore different approaches to problems
- use mathematical language to demonstrate understanding and reasoning
- show a high level of pride in the presentation of work
- be provided with the appropriate support and opportunity to meet learning objectives and achieve national expectations
- be ambitious learners solving challenges to deepen and extend their learning
- be equipped with key knowledge and confidence to help them flourish at secondary school and beyond.