

**St. Augustine's Catholic Primary School
Hoddesdon**



Maths Policy

September 2025

Updated: September 2025
September 2026

Renewal:

MISSION STATEMENT

*We come to school to live and learn happily together
by loving ourselves and each other as Jesus teaches us.*

Values:

We believe that the purpose of St Augustine's Catholic Primary school is to:

- Help pupils to live and learn in a Catholic Christian environment by accepting and respecting others in our school community and wider world.
- Provide an environment in which high expectations will lead to a striving for excellence in all areas of school life.
- Educate and develop each member of the school community by building on their strengths and supporting their weaknesses.
- Foster purposeful relationships with those who learn in work in and visit our school where diverse views and backgrounds are respected.

Principles

At St. Augustine's we believe that mathematics is a vital tool for everyday life. Through developing our children's ability to have fluency of number, to reason and solve problems, mathematics teaches them how to make sense of the world around them. Cross curricular links will be implemented whenever possible to enable our children to appreciate relationships and patterns in number, measure and shape in their everyday lives, thus embracing the new approach to deepening their understanding of maths.

Aims

We share the aims of the national curriculum for mathematics to ensure that all pupils:

- **Become fluent in the fundamental of mathematics, with increasingly complex problems over time, so pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.**
- **Can reason mathematically, by following a line of enquiry, understanding relationships, developing an argument, and justifying using mathematical language.**
- **Can solve problems by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.**
- **To develop use of Mathematical language.**
- **To become independent learners and to work co-operatively with others.**

This will be achieved by:

- promoting enjoyment and enthusiasm for mathematical learning through practical activities, exploration and discussion using mathematical language
- developing the children's ability to solve problems through decision-making and reasoning in a range of contexts.

- developing a practical understanding of the ways in which information is gathered and presented.
- developing confidence, competence and having a thorough knowledge and understanding of numbers and the number system through rapid recall and exploring features of shape, space and measure in a range of contexts
- Providing pupils with a mathematics curriculum that will create confidence, creativity, enquiry, independence, and inquisitive mathematicians.

Introduction

In September 2021, St Augustine's began transitioning towards a mastery approach to the teaching and learning of Mathematics. This would be a gradual process and take several years to embed. The rationale behind changing our approach to teaching mathematics lies within the NCETM Maths Hub Programme as well as the 2014 National Curriculum, which states:

• *The expectation is that most pupils will move through the programmes of study at broadly the same pace.*

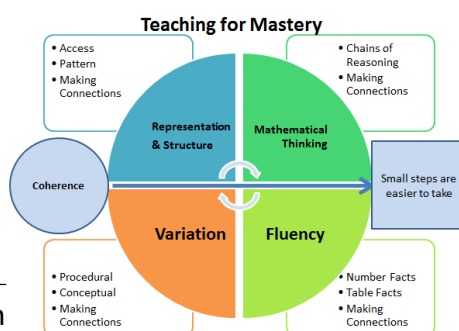
• *Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content.*

• *Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.*

FLUENCY – REASONING – PROBLEM SOLVING

These three key aims of the National Curriculum should be addressed in each sequence of learning.

Big Ideas of Mastery



Our teaching of mastery is underpinned

- Opportunities for **Mathematical Thinking** allow children to make chains of reasoning connected with the other areas of their mathematics.
- A focus on **Representation and Structure** ensures concepts are explored using concrete, pictorial and abstract representations, the children actively look for patterns and generalise whilst problem solving.
- **Coherence** is achieved through the planning of small, connected steps to link every question and lesson within a topic.
- Teachers use both procedural and conceptual **Variation** within their lessons and there remains an emphasis on **Fluency** with a relentless focus on number and times table facts.

Classroom Environment:

1. Everyone can learn mathematics to the highest levels.
2. If you 'can't do it', you 'can't do it **yet**'.
3. Mistakes are valuable.
4. Questions are important.
5. Mathematics is about creativity and problem solving.
6. Mathematics is about making connections and communicating what we think.
7. Depth is much more important than speed.
8. Mathematics lessons are about learning, not performing.

Teaching for Mastery Principles

- **It is achievable for all** – we have high expectations and encourage a positive 'can do' mindset towards mathematics in **all** pupils, creating learning experiences which develop children's resilience in the face of a challenge and carefully scaffolding learning so everyone can make progress.
- **Deep and sustainable learning** – lessons are designed with careful small steps, questions and tasks in place to ensure the learning is not superficial.
- **The ability to build on something that has already been sufficiently mastered** – pupils' learning of concepts is seen a continuum across the school.
- **The ability to reason about a concept and make connections** – pupils are encouraged to make connections and spot patterns between different concepts (E.g. the link between ratio, division and fractions) and use precise mathematical language, which frees up working memory and deepens conceptual understanding.
- **Conceptual and procedural fluency** – teachers move mathematics from one context to another (using objects, pictorial representations, equations and word problems). There are high expectations for pupils to learn times tables, key number facts (so they are automatic) and have a true sense of number. Pupils are also encouraged to think whether their method for tackling a given calculation or problem is Appropriate, Reliable and Efficient (A.R.E).
- **Problem solving is central** – this develops pupils' understanding of why something works so that they truly have an appreciation of what they are doing rather than just learning to repeat routines without grasping what is happening.
- **Challenge through greater depth** - rather than accelerated content, (moving onto next year's concepts) teachers set tasks to deepen knowledge and improve reasoning skills within the objectives of their year group.

Curriculum design and planning

- Staff use ***Essential Maths' Scheme of Learning*** to develop a coherent and comprehensive conceptual pathway. The focus is on the **whole class progressing together**.
- Learning is broken down into small, connected steps, building from what pupils already know. The lesson journey should be detailed and evident on Smart Notebook using the schools planning negotiables.
- Difficult points and potential misconceptions are identified in advance and strategies to address them planned.
- Key questions are planned, to challenge thinking and develop learning for all pupils.
- Contexts and representations are carefully chosen to develop reasoning skills and to help pupils link concrete ideas to abstract mathematical concepts.
- The use of high-quality materials and tasks to support learning and provide access to the mathematics, are integrated into lessons. These may include ***Essential Maths, Destination Questions, Deepening Understanding, NCETM Mastery Assessment*** materials, ***NRICH***, visual images and concrete resources.
- Opportunities for extra fluency practice (*instant recall of key facts, such as number bonds, times tables, division facts, addition, and subtraction facts*) should be provided outside mathematics lessons (morning starters or post-lunch).
- Planning is carried out in three phases to ensure appropriate pace, progression and coverage. This coverage is reviewed by class teachers and planning is adjusted accordingly to ensure appropriate coverage of all mathematical strands:
- Long term - Our yearly teaching programme identifies the key objectives in mathematics that we teach each year.
- Medium term – Our medium-term plans give brief details of the main teaching objectives for each term. They define what we teach. They ensure an appropriate balance and distribution of work across each term.
- Short term – This allows for the three maths aims to be incorporated into every lesson and for teachers to have more time to effectively plan for challenging activities targeted towards the raised expectations within their year group. Planning lists the specific

learning objectives and success criteria for each lesson and gives details of how the lessons are to be taught.

- Copies of all topics to be taught are available to parents at the beginning of each term on the school website under the Curriculum Information Maps. Signposts are also uploaded onto the class page weekly to inform parents about the learning in each class that week.

Lesson Structure

- Lessons are sharply focused; digression is generally avoided.
- Key new learning points are identified explicitly.
- There is regular interchange between concrete/contextual ideas, pictorial representations, and their abstract/symbolic representation.
- Mathematical generalisations are emphasised as they emerge from underlying mathematics, which is thoroughly explored within contexts that make sense to pupils.
- Making comparisons is an important feature of developing deep knowledge. The questions “What’s the same, what’s different?” are often used to draw attention to essential features of concepts.
- Repetition of key ideas (for example, in the form of whole class recitation, repeating to talk partners etc) is used frequently. This helps to verbalise and embed mathematical ideas and provides pupils with a shared language to think about and communicate mathematics.
- Teacher-led discussion is interspersed with short tasks involving pupil to pupil discussion and completion of short activities.
- Formative assessment is carried out throughout the lesson; the teacher regularly checks pupils’ knowledge and understanding and adjusts the lesson accordingly.
- Gaps in pupils’ knowledge and understanding are identified early by in-class questioning. They are addressed rapidly through individual or small group intervention, either on the same day or the next day, which may be separate from the main mathematics lesson, to ensure all pupils are ready for the next lesson.
- Teachers discuss their mathematics teaching regularly with colleagues, sharing teaching ideas and classroom experiences in detail and working together to improve their practice.

Equal opportunities

At St. Augustine’s we teach Mathematics to all children, whatever their ability or individual need. We provide a full range of opportunities for all pupils, regardless of gender, disability, ethnicity, social, cultural or religious background. All pupils receive at least one Maths lesson a day and are provided with learning opportunities to enable them to make at least good progress. This is monitored by the class teacher, assessment leader and Inclusion leader who analyse pupil performance every half term in pupil progress meetings throughout the school, to ensure that there is no disparity between groups.

All activities are planned to challenge the able and support the less able. In addition, throughout the year booster classes are offered to Year Six children to help accelerate the children's ability and confidence. Intervention lessons are also carried out during the day to allow the less able to make more progress, as well as catch-up sessions for those children who did not achieve the learning objective from the previous day's learning in order for them to be working at the expected level before the next day's lesson. This will ensure the reduction of learning gaps happening.

Differentiation and support

It is part of our curriculum policy to provide a broad and balanced education to all children. Children not in line with ARE are identified during pupil progress meetings each half term and prioritised for early additional intervention strategies. Class teachers are responsible for the content of these interventions alongside our Inclusion Leader, although they may be delivered by an LSA. Extra opportunities are given to further challenge the children who have been identified as having strengths in mathematics and are exceeding ARE.

Children may have their specific needs supported through additional adults, different resources, differentiated activities. We ensure learning opportunities are matched to the needs of the children based on systematic and accurate assessment of pupils' prior skills, knowledge and understanding. All Maths planning considers and provides for specific needs and children's targets. A register of children considered to have specific learning needs is kept and overseen by the Inclusion Leader. Intervention strategies are also implemented for children working below their age-related expectations. Each class teacher and Learning Assistant has their own planned intervention timetable for both catch-up sessions and intervention sessions. This is formulated during the Pupil Progress Meetings that take place every half term.

Assessment and Recording

We assess children's work in Maths using three aspects:

- 1) Short Term – We make short term assessments daily. They are used to help adjust daily plans according to the outcome of each lesson. We use them to assess the children's understanding of a topic or focus and to make decisions about the children's needs.
- 2) Medium Term – We make medium term assessments every half-term, to measure progress against the key objectives, and to put in place initiatives where needed. Class teachers assess the children in maths by following the Assessment Policy guidelines. A balance of test papers and the HFL assessment tracking grids are used to assign each child an age-related band. These are recorded each onto AM7 at the end of every term. At the end of every half term, Pupil Premium and FSM children are the focus of Pupil Progress Meetings. These assessments are brought to the Pupil Progress Meetings at the beginning of each half term, where the progress of each

child is monitored, analysed and necessary actions put into place for those children not progressing as expected.

- 3) Long Term – We make long term assessments at the end of each term. We use these to assess progress against school and national targets. Children receive their reports at the end of each year, and it is stated at what level the child is working at in relation to age related expectations for their year group. We pass this information on to the next teacher at the end of the year so that they can plan for the new school year.

We use the TAFs for children in Years 2 and 6, as well as the HFL assessment tracking grids. The HFL assessment tracking grids are used for Years 1, 3, 4 and 5. Nursery and Reception use the EYFS Framework and Development matters.

Home/School Link

At St Augustine's we encourage parents to be involved in the mathematics curriculum by:

- Inviting parents in twice a year for parents evening to discuss their child's progress.
- Reporting on mathematical progress in their child's report.

Pupils are provided with mathematics home-learning on a weekly basis.

Early Years Foundation Stage (EYFS)

Children in EYFS explore mathematical concepts through active exploration and their everyday play-based learning. Children are taught key concepts and develop number sense using a hands-on practical approach. EYFS practitioners provide opportunities for children to manipulate a variety of objects which supports their understanding of quantity and number. Pupils explore the 'story' of numbers to twenty and the development of models and images for numbers as a solid foundation for further progress. The CPA approach is used when teaching children key mathematical skills. Practitioners allow children time for exploration and the use of concrete objects helps to support children's mathematical understanding. Mathematics in the early years provides children with a solid foundation that will enable them to develop skills as they progress through their schooling and ensures children are ready for the National Curriculum.

Subject Leader

- Ensures teachers understand the requirements of the National Curriculum and supports them to plan lessons. Leads by example by setting high standards in their own teaching.
- Leads continuing professional development; facilitates joint professional development – especially Lesson Study; provides coaching and feedback for teachers to improve pupil learning.
- Leads the whole-school monitoring and evaluation of teaching and learning in mathematics by observing teaching and learning in mathematics regularly; analysing

assessment data to plan whole school improvement in mathematics; conducting work scrutiny to inform evaluation of progress; conducting pupil interviews.

- Takes responsibility for managing own professional development by participating in external training, independent private study, engaging in educational research and scholarly reading and keeping up to date with Teaching for Mastery developments.
- Keeps parents informed about mathematics issues.
- Ensures that the school's senior leaders and governors are kept informed about the quality of teaching and learning in mathematics.
- Works in close partnership with the school's senior leaders to ensure the learning needs of all pupils in mathematics are met effectively.
- Keeps the school's policy for mathematics under regular review. Mrs. Mary Nagle is the Maths link Governor for this year and meets annually with the subject leader for a review.

Monitoring

Monitoring the standards of children's work and the quality of teaching and learning in Maths is the responsibility of the subject leader. They give the Headteacher an annual summary evaluating strengths and weaknesses in the subjects and indicate areas for further improvement. Lesson observations are carried out by both the Headteacher and subject leader. Samples of children's work are also kept showing the expected levels of achievement in Maths for each year group. A record of termly assessments is kept, so progress can be tracked.

Resources

All classes have a wide range of appropriate resources to support the teaching of Mathematics. All classes also have an area in the classroom dedicated to displaying children's learning. Children have access to small whiteboards for use in lessons. Other manipulatives are available in each classroom. Children have access to Times Table Rockstars. This is an interactive site. A range of other software, especially Test Base, is available to support work with the computers as well.

Calculation Overview

The Calculation Policy (which is an ongoing document) demonstrates the teaching of mental calculation strategies across all four operations and written calculations.