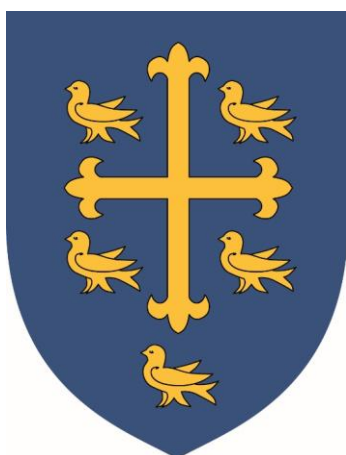


St. Edward's Catholic Primary School



Mathematics Policy 2025/26

'Jesus is at the heart of all that we do'

At St. Edward's, we are committed to safeguarding and promoting the welfare of the children and adults in our school, and we have the same expectation of our staff and volunteers.

Policy agreed/Signed by: _____

Date: _____

(Mr K Connolly – Chair of Governors)

Agreed on: September 2025

Review date: September 2026

Mathematics Policy

At St Edward's we aim to provide a high-quality Mathematics education – teaching children the essential skills and knowledge to develop an understanding of the world and to create a natural curiosity and love of learning for Mathematics.

Catholic Social Teaching

Our Maths curriculum aims to provide a holistic mathematical education that not only meets the National Curriculum standards but also reflects the values of the Catholic social teachings. By embracing diversity, fostering creativity, and promoting social and spiritual development, we aspire to nurture well-rounded individuals who appreciate the power of Maths and number in everyday life. Our approach of Mastery and fluency is designed to support a deeper mathematical understanding of number for all pupils.

We recognise that Mathematics equips pupils with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways. Mathematics is important in everyday life. It is integral to all aspects of life and we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them.

Through a positive, caring environment, we will nurture confidence in the subject and a love of mathematics, to enable every child to reach his/her full potential. We promote a 'can do' attitude to maths without a fear of making mistakes. We embrace any mistakes as a learning opportunity and see them as a challenge. Children will be given time, support and resources to develop a depth of understanding where they can express ideas fluently and talk about the subject using appropriate mathematical language.

What is Mathematics?

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solutions to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject. (National Curriculum 2014).

Introduction

At St Edward's Catholic Primary School, a mastery approach to the teaching of mathematics has been adopted, so we have high expectations for all our pupils. We endeavour to make the mathematics curriculum accessible to all pupils; moving them through the programme of study at broadly the same pace. All children need a deep understanding of the mathematics they are learning in order that future learning is built upon firm foundations. To help ensure children keep up rather than need to catch up we have in lesson interventions and same day catch up sessions for children who need extra support in developing their understanding of new concepts taught.

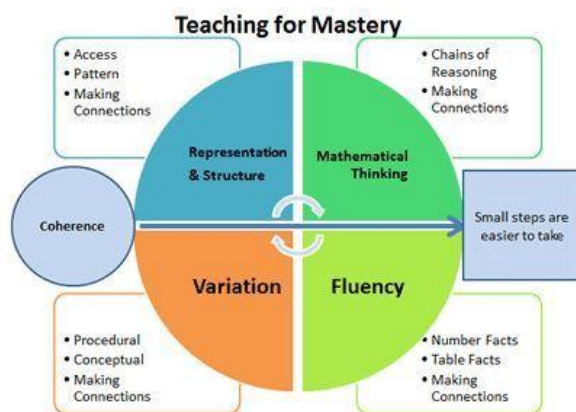
Intent

The intent of our Mathematics curriculum is to deliver an engaging, balanced mathematics curriculum which is accessible to all and that will maximise the outcomes for every child so that they know more, remember more and understand more. Our aim is to deliver quality teaching that will produce individuals who are numerate, creative, independent, inquisitive, enquiring and confident.

It is vital that a positive attitude towards mathematics is encouraged amongst all our pupils to foster confidence and achievement in a skill that is essential in our society. At St Edward's we use the NCETM curriculum prioritisation materials and NCETM Mastering Number as our core Mathematics curriculum. This is supplemented by high quality resources from White Rose, Power Maths and Nrich. We are committed to ensuring that all pupils achieve mastery in the key principles of mathematics, appropriate for their age group, in order that they make genuine progress and avoid gaps in their understanding that provide barriers to learning as they move through education. Assessment for learning, an emphasis on investigation, problem solving and the development of mathematical thinking and a rigorous approach to the development of teacher subject knowledge are therefore essential components of our whole school approach to this subject.

Teaching for mastery – What does mastering maths mean?

Mastering maths means acquiring a deep, secure and adaptable understanding of the subject. Central to the development of mastery in our classrooms are the ‘five big ideas’ these have been drawn from research evidence, underpinning teaching for mastery. This diagram is used to bind these ideas together and show how they are closely linked.



Coherence

Connecting new ideas to concepts that have already been understood, and ensuring that, once understood and mastered, new ideas are used again in next steps of learning- all steps being small steps.

Representation and Structure

Representations used in lessons expose the mathematical structure being taught. These representations are practical and pictorial models. The aim being that students can do the maths without recourse to the representation.

Mathematical Thinking

If maths concepts are to be understood deeply, they must not merely be passively received but must be worked on by the student: thought about, 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. Procedural fluency is the ability to apply procedures accurately, efficiently, and flexibly; to transfer procedures to different problems and contexts; to build or modify procedures from other procedures; and to recognize when one strategy or procedure is more appropriate to apply than another.

Variation

Varying the way a concept is initially presented to students, by giving examples that display a concept as well as those that don't display it. Also, carefully varying practice questions so that mechanical repetition is avoided, and thinking is encouraged.

We aim that all pupils:

- Become fluent in the fundamentals of mathematics through varied and frequent practice with increasing complex problems over time so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Solve problems by applying their mathematics to a variety of problems with increasing sophistication including breaking them down into a series of simpler steps and persevering in seeking solutions.
- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations and developing an argument, justification or proof using correct mathematical language and vocabulary.

The 3 aims of the National Curriculum: Fluency – Reasoning- Problem Solving - should be addressed in each sequence of learning.

As a result, our pupils will:

- Be competent and confident in taking risks to apply knowledge, concepts and skills.

- Be able to solve problems, reason mathematically and think logically and systemically.
- Develop an understanding of the connectivity of patterns and relationships within mathematics.
- Be able to work independently and in cooperation with others and to develop personal qualities such as perseverance.
- To be able to use and apply mathematics across the curriculum and to understand the application of mathematics in real life contexts and scenarios.

Implementation

Curriculum Design – Teaching for Mastery Principles

We believe that the vast majority of children can succeed in learning mathematics in line with national expectations.

- **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.
- **The whole class is taught mathematics together**, with the expectation that every child will master the key concept, whilst some will work more deeply on challenging tasks.
- **Deep and sustainable learning** – lessons are designed with careful small steps, questions and tasks in place.
- **The ability to build on something that has already been sufficiently mastered** – pupils’ learning of concepts is seen as a continuum across the school.
- **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 and key number facts and have a true sense of number. They are encouraged to think whether their method is appropriate, reliable and efficient.
- **Differentiation** is in the form of the amount of time that pupils will spend using concrete resources or pictorial representations to grasp concepts. It will be seen through targeted questioning and the feedback and scaffolding individual pupils receive in class as they work through problems. It is also in the form of the continued teaching of a concept, through in lesson intervention.
- **Challenge through greater depth** – teachers set tasks to deepen knowledge and improve reasoning skills within the objectives for their year group.
- **The ability to reason about a concept and make connections** – pupils are encouraged to make connections and spot patterns between different concepts.
- **Precise mathematical language**, often used in ‘stem sentences’, is used by teachers so that mathematical ideas are conveyed with clarity and precision.
- **Sufficient time is spent on key concepts**, to ensure that learning is well developed and deeply embedded before moving on.
- **Problem solving is central** to applying their understanding.

Planning

At St Edward’s Catholic Primary, there is a consistent approach to planning, which is undertaken at three levels:

Long Term Planning – is detailed in the programmes of study in the National Curriculum (2014) for Mathematics. These are set out for KS1 and KS2, as end of year key objectives to be taught in each year group. In EYFS, we follow the guidance outlined in the Statutory Framework for the Early Years Foundation Stage as children make progress towards and where appropriate beyond the Early Learning Goals.

Medium Term Planning – details the main teaching objectives for each term, ensuring that there is an appropriate balance and distribution of work across each term. Guidance from the NCETM Curriculum Prioritisation Materials supplemented by Mastering Number and White Rose Maths (small steps) are documents used to support this planning process.

Short Term Planning – where lessons are collaboratively planned in year groups. Teachers are specifically asked to consider learning objectives, basic skills, key questions, representations and resources, stem sentences and mathematical vocabulary and the role of adult support. They are advised to refer to mastery resources such as outlined above for examples of tasks and scaffolding for learners who may struggle to grasp concepts. Teachers consider the prior learning they are building on as well as misconceptions that may need to be addressed.

Lesson Design

- The daily maths lesson should be between 45 and 60 minutes. In addition, all classes in KS1 and KS2 will deliver a fluency lesson of approximately 20 minutes. These sessions will focus on fluency practice and reinforcing objectives which have already been taught.
- Lessons are sharply focused with one new objective, 'small step' introduced at a time.
- 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.
- Teaching sequences will involve review of prior learning, teacher input and teacher lead discussion interspersed with short tasks involving pupil-to-pupil discussion, independent work and challenges. Independent practice includes fluency practice, reasoning, problem solving and higher-order thinking activities.
- The use of high-quality mastery materials and tasks to support learning and to provide access to the mathematics is integrated into lessons.
- Contexts and representation are carefully chosen to develop reasoning skills and to help pupils link concrete ideas to abstract mathematical concepts.
- Repetition of key ideas is used. This helps to verbalise and embed mathematical ideas and provides pupils with a shared language to think and communicate mathematics.
- Formative assessment is carried out throughout the lesson, the teacher regularly checks pupils' knowledge and understanding and adjusts the lesson accordingly.
- Teachers discuss their mathematics teaching regularly in year group planning meetings, sharing teaching ideas and classroom experiences in detail and working together to improve their practice.

EYFS

In the Foundation Stage, children are given the opportunity to develop their understanding of number, measurement and shape and space through a combination of short, formal teaching sessions as well as a range of planned structured play situations, where there is plenty of scope for exploration. An emphasis is placed on children's ability to subitise and to instantly recognise small groups of objects. This is then used to support their understanding of a number and its component parts. Children will become competent 'counters' so that their fluency with the number system provides a foundation for mathematical understanding. Counting forwards and backwards from different starting and ending points is essential and opportunities for this will be planned for. All are encouraged to articulate their thinking and share 'how they know'.

To give all children the best opportunities for effective development and learning in number and shape, space and measures, practitioners should give particular attention to:

- Providing opportunities for children to communicate thoughts, ideas and feelings and build up relationships with adults and each other.
- Teach discrete sessions on number and shape, space and measure, but also encourage children to use and apply their skills and knowledge in a range of areas.
- Providing differentiated support through adult-led activities to target children at their stage of development.
- Planning an environment that reflects the importance of mathematics through signs, notices, and real-life examples.
- Ensuring continuous provision provides a range of engaging activities to develop mathematical skills.
- Providing opportunities for children to see adults subitising, counting and using maths and for children to experiment with mathematics for themselves through recording and using a range of equipment.
- Providing time and opportunities to develop spoken language through conversations between children and adults, both one-to-one and in small groups, with particular awareness of, and sensitivity to, the needs of children for whom English is an additional language.

Special Educational Needs and Equal opportunities

All children have equal access to the Mathematics curriculum, regardless of race, religion, ability or gender. Maths forms part of the school curriculum policy to provide a broad and balanced education for all children. Children

access the curriculum at the level appropriate to them, ensuring rapid measurable progress. Resources and learning environments are planned and designed to enable all children access to the learning required. Differentiated activities are provided to support struggling learners and challenge rapid graspers, so they are able to work at greater depth in mathematics. Where applicable, children's provision plans will incorporate suitable maths objectives from the National Curriculum and the class teacher will be responsible for identifying and planning for those needs, with the help from the Maths Co-ordinator and SENDCO if applicable. When educational support staff are available to support groups or individual children, they work collaboratively with the class teacher. The support teacher feeds back to the class teacher when appropriate to inform evaluations, assessment and future planning.

SEND children also have the opportunity throughout the year to take part in appropriate intention programmes that support them further, fill in any gaps in their understanding and enable them to reach their full potential. Children with English as an additional language (EAL) will be given access to additional resources and teaching to support their learning and to ensure they make maximum progress from their individual starting points.

Maths across the curriculum

It is important for pupils to develop and apply their Mathematical skills across other subjects in the curriculum and to real life experiences, appropriate to their learning needs and development. Opportunities for developing their maths skills across other subject areas and to real life experiences will be planned for through the school year.

Impact

As a result of teaching and interventions, children will be:

- Engaged and challenged.
- Confident to talk about Maths and their learning and the links between Mathematical topics and progression of knowledge.
- Lessons which use a variety of carefully selected resources to support learning and expose the mathematical structures.
- Different representations of mathematical concepts.
- Learning which is tracked and monitored to ensure all children make good progress and reach their full potential.

Feedback and Marking

Marking in mathematic books should be completed in line with the school Feedback and Marking Policy. It is essential that all marking picks up and addresses any misconceptions/mistakes and thorough questioning ensures children have clarified their thinking clearly. Teachers and Teaching Assistants are expected to use appropriate feedback methods during the lessons. Feedback should be effective in ensuring pupil progress throughout a lesson or unit of work. It is recognised that live feedback in addressing errors and misconceptions is the most effective.

Assessment

Formative assessment for learning should occur throughout the entire maths lesson, enabling teachers to adjust their teaching/input to address the needs of the children. Teachers assess children daily through:

- Analysing errors and picking up on misconceptions.
- Asking questions and listening to answers.
- Facilitating and listening to discussions.
- Making observations.

These ongoing assessments inform future planning and teaching. Lessons are adapted readily and short-term planning evaluated and edited in light of these assessments.

Summative assessments are also used. Teachers use these to inform planning and meet the individual needs of pupils. In both KS1 and KS2 termly tests from White Rose are used to track progress.

National curriculum tests are used at the end of KS1 and KS2; teachers also use past and sample papers to inform their assessments as they prepare pupils for these assessments.

Commented [M(1): Are there KS1 SATs now?

All children in Year 4 complete the 'Multiplication Check' with tracking and monitoring of progress taking place from Year 2.

Within the EYFS during the first six weeks of starting school the government baseline assessment is completed, alongside teacher's assessment of the wider maths curriculum. All children are assessed against the Early Learning Goals at the end of Reception.

Regular moderation sessions are held within and across year groups. Staff also attend local cluster meetings with colleagues from local schools to ensure accuracy in assessments. Teachers talk through the progress of their pupils at termly pupil progress meetings; this ensures targeted support can be given to those who need it.

Catholic Social Teaching (CST)

CST makes links between social issues and scripture, highlighting how Catholic faith can be lived out in society. At St Edward's we strive to equip all pupils with the skills and knowledge they need to make positive contributions to the society in which they live, and to ensure all pupils understand how they can live out the principles of CST. There are seven main principles of CST:

- **The Dignity of the Human Person**
When students work together, they learn to respect one another's ideas and perspectives. This respect aligns with the recognition of human dignity in Catholic social teaching. We look at problem solving and looking at challenging reasoning which have mathematical solutions. We recognise that the person and their explanations matter as much as the solution.
- **Family and Community**
In maths lessons we are able to recognise the opinions and ideas of others and work collaboratively to resolve mathematical differences.
- **Solidarity and the Common Good**
We embrace the theme of common good in maths lessons by incorporating mathematical concepts with real life issues for example financial literacy and word problems involving world or societal problems.
- **Rights and Responsibilities**
- **Option for the Poor and Vulnerable**
Mathematical problem solving and reasoning questions can contain reference to social injustices, including wage discrepancies and mortality rates.
- **Stewardship of God's Creation**
- **The Dignity of Work**

The teaching of these seven principles is interwoven in the teaching of Mathematics, where appropriate.

Resources

Pupils should have the opportunity to build competency in a topic by taking the following approach:

Concrete – children should have the opportunity to use concrete objects and manipulatives to help them understand what they are doing.

Pictorial – pupils should then build on this concrete approach by using pictorial representations. These representations can then be used to reason and solve problems.

Abstract – with the foundations firmly laid, learners should be able to move to an abstract approach using numbers, symbols and key concepts with confidence.

Each class/year group has resources such as place value counters, Base 10/dienes apparatus, Numicon, two sided counters with other mathematical resources stored in a central area – Intervention Room.

Presentation of Work

- All children have the opportunity to record their mathematical thinking in their own personal exercise book.
Reception - plain A4 book
KS1 – 1cm square A4 book
KS2 – 7mm square A4 book
- A 2cm square margin should be drawn on the left side of each page in KS2.
- The date should be written or stuck into the book to indicate the new day's learning. It should be written on the left side in abbreviated form eg 10.9.22. Children may also write a calculation in brackets linked to the date. Eg (5x2. 8+1. 20+2)
- The date and headings should be underlined, with each part of the lesson being clearly labelled.
- All work is completed in pencil, the use of rubbers is discouraged when completing work as children should cross out any mistakes with one or two straight lines, allowing the teacher to analyse the errors when marking. Rubbers are appropriate when working on shape/space work.
- Worksheets and prompts should be neatly stuck in. When small prompts such as those used for the Anchor Task are stuck in, the lines and margin in the book should be used as a guide. Work should be completed underneath.
- Children should write 1 digit in each square and when writing a sequence of numbers, a square should be left between each number. The squares should also be used to support children during formal calculations such as column addition and subtraction.

Maths Working Walls/Displays

These should be designed to reinforce and consolidate children's knowledge, understanding, and aid children in their learning. They must be up to date and display what is being covered in class at that time. For consistency across the school, all classes have the same following format for learning wall:

- Key vocabulary, sentence starters, and stem sentences
- Examples
- Pictorial representations for the topic taught must be displayed
- Examples of children's work must be included. Any written and mental strategies should be clearly displayed in line with the calculation policy
- Must be changed regularly and in line with the topic taught
- Reception must have mathematical environments to support learning

Homework

There is the expectation that all pupils will learn their key number facts., this includes a focus on number bonds and times tables. Teachers should send additional homework to practise and consolidate pupil understanding as identified for their year group.

There are useful websites listed on the school website where children can access number facts and games at home.

Numbots and Times Table Rockstars should be set as regular weekly homework. All pupils from Reception to Year 6 have their own log in details.

Home/school links

At St Edward's we recognise that parents/carers can make a significant difference to a child's progress in Maths.

We encourage parents to be actively involved by:

- Providing parent's evenings, which give them information on their child's progress and their targets for the future.
- Providing an end of year report, which outlines progress and attainment.
- Inviting parents to information events on areas of mathematics to support homework activities.
- Providing additional information, guidance, and support via the school website.
- Providing updates on individual class and year group events on the class pages on the website and Twitter.

Computing and use of ICT

ICT is used in various ways to support teaching and motivate children's learning. Each classroom has access to a laptop connected to an interactive whiteboard. All teachers are provided with an I-pad to support their planning and provision and are encouraged to use ICT to enhance teaching and learning in mathematics where appropriate. The maths policy and SOW adhere to the whole school E-safeguarding policies and procedures.

Monitoring and Evaluation

All teachers are responsible for monitoring standards but the subject co-ordinator, under the direction of the Head Teacher takes the lead in this. Monitoring activities are planned across the year. In summary these are:

- Monitoring of class teacher's medium-term plans for maths.
- Monitoring of teaching and learning taking the form of lesson observations, learning walks, book monitoring, pupil interviews, team teaching and collaborative planning.
- Monitoring of assessment data, including termly results and statutory assessments.
- Monitoring progress of key groups of pupils including those who are SEND or PP.
- Monitoring delivery and impact of interventions.

Training needs are identified as a result of whole school monitoring and evaluation, performance management and needs of children. These will be reflected in the Mathematics Development Plan.

Leadership and Management

The Role of Governors

The Governors are informed regularly about standards and the progress throughout the school, through the Governor meetings, reports and the link governor evening. The headteacher's report to Governors provides a summary of the data and actions. The link governor has reviewed the Mathematics policies, subject development plan and analysis of data.

The Role of the Mathematics Subject Leader is to:

- Take the lead in policy development and the production of long and medium-term planning, designed to ensure progression and continuity in Mathematics throughout the school, ensuring that these are kept under regular review.
- Ensure teachers understand the requirements of the National Curriculum and EYFS Statutory Framework and support them to plan high quality lessons.
- Support colleagues with teaching as well as assessment and record keeping activities.
- Analyse data from national and school assessments.
- Take responsibility for managing own professional development by participating in external training. Keep up-to-date with developments in Mathematics education and disseminate information to colleagues as appropriate.
- Lead continuing professional development and learning for the teachers and teaching assistants, providing coaching and feedback for teachers to improve pupil learning.
- Lead the whole school monitoring and evaluation of teaching and learning in mathematics by observing teaching and learning in maths regularly; analysing assessment data in order to plan whole school improvement in mathematics; conducting work scrutiny to inform evaluation of progress; conduct pupil interview's and reporting to the Head Teacher and Leadership.
- Take responsibility for the purchase and organisation of mathematical resources.
- Keep parents informed about mathematical developments.
- Ensure that the school's senior leaders and governors are kept informed about the quality of teaching and learning in mathematics.
- Work in close partnership with the school's SENDCO to ensure that the learning needs of all pupils in mathematics are met effectively and interventions are planned carefully for identified children.
- Ensure the 'maths' page on the school website is kept up to date and reviewed regularly.
- Organise whole school 'maths' events when applicable.

This policy is used in conjunction with the school Maths Calculation Policy and Fluency Policy.

