

English Martyrs' Catholic Primary School



Mathematics Policy

Our Mission

Our children are all unique, beautiful **individuals** but together we are a **masterpiece**, brothers and sisters in **Christ**.
As witnesses of Christ, working together as a **Team**, we strive to promote the **Gospel Values** and Teachings of Jesus by providing a **caring, stimulating environment**, with **nurture, trust, love** and **tolerance** through our spirituality, learning and play. By making connections with Jesus, we promote **high ambitions** and **confidence** to achieve our goals.

Overview

At English Martyrs' Catholic Primary School, we aim to develop, consolidate and enhance pupil's mathematical knowledge and mathematical skills for life so they have the foundations and opportunities to attain future goals. We foster the approach that Mathematics is essential to everyday life and critical for Science, Technology and Engineering, an essential life skill.

Our high-quality Mathematics education provides a foundation for pupils to become problem solvers in readiness for a positive life.

This policy should be read alongside English Martyrs' Catholic Primary School Calculations Policy

Intent

Within our curriculum, we ensure all children are prepared for life, with the skills they need to achieve, aspire and accomplish both academically, emotionally, spiritually and creatively, regardless of their faith, creed or race; meeting every child's potential and their needs. At English Martyrs' this includes meeting the needs of a very mixed community representing a broad range of faiths, ethnicities, creeds and socio-economic circumstances: a significant proportion of children with high needs and are disadvantaged; children living in high social deprivation, asylum seekers, vulnerable children and families who seek security and safety in our school family.

Our intent is for learning without barriers so that all children can succeed.

Our Intent is to meet these needs by...

- ...providing exciting opportunities for children to explore their mathematical talents.
- ...provide the cultural capital needed so that children are well placed for future positive outcomes.
- ...providing all children with bespoke and tailored teaching to ensure their mathematical needs are met regardless of starting point.
- ...developing children's early Maths skills from the outset.
- ...giving opportunities to use Mathematics across the curriculum at all stages and phases.
- ...providing a Maths rich learning environment which influences, entices and encourages children of all abilities to thrive.
- ...providing bespoke support for children who have additional needs in Mathematics.
- ...providing challenge for all so that all children have the opportunity to reach their potential.
- ...providing opportunities to share knowledge, skill and understanding of basic mathematical concepts with others.

- ...providing a variety of mediums to explore Mathematics, including Digital Technologies.
- ...providing tailored support for children at all standards in developing their Mathematical reasoning and understanding so that they can thrive.
- ...providing a range of opportunities for children to experience Mathematics in the living world.

The National Curriculum for mathematics aims to ensure that all pupils:

- 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
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **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.

Implementation

In order to implement the above intentions, the following are essential:

Organisation and Methodology

Teaching Organisation and Planning

- Clear, well-structured and sequences sessions and units of work which build a sequential progression of skills and knowledge, building upon prior learning, skill and knowledge
- Daily Mathematics lessons
- Daily *Mega Maths* sessions ~ an Arithmetic based lesson, ensuring ALL basic arithmetic skills are taught in short, sharp, focussed sessions with guided work and extra support where needed.
- Whole class quality first teaching, with supported and targeted support as needed, both for those who need additional help and those to challenge even further
- In EYFS we follow the Lancashire Planning units for EYFS which link to the assessment criteria and ELG elements following *Birth to 5 Matters* which we use to assess
- Years 1 – 6 use Mastery approaches with Years 1 – 5 using [Red Rose Mastery Maths](#) to develop children's depth and breadth of knowledge; Year 6 use elements of both White Rose Mastery Approaches alongside Lancashire Unit Plans to ensure all aspects of the Primary Curriculum are covered.
- Individual, paired, group and whole class problem solving and work activities
- Regular reviews of prior learning and understanding in the form of quick quizzes, use of *Learning by Questions* to ensure any misconceptions are identified and clarified from the earliest point

- Programmes of Study inform medium term plans and subsequently short term planning. Class teachers are responsible for the relevant provision of their own classes and individually develop plans, which give details of learning objectives and appropriate differentiated activities. Although planned in advance they are adjusted on a daily basis to better suit the arising needs of a class and individual pupils.

Curriculum Links

Throughout the whole curriculum, opportunities to extend and promote Mathematics should be and are sought. Regular focus days are given for Maths *I am a Mathematician*.

Programme of Study

Early Years Foundation Stage

- EYFS base planning on assessment using Birth to 5 Matters, tailoring bespoke learning to meet individual and cohort need

Key Stage 1 and 2

The Programmes of study for mathematics are set out year-by-year for Key Stages 1 and 2 in the National Curriculum (2014). The programmes of study are organised in a distinct sequence and structured into separate domains.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1017683/Maths_guidance_KS_1_and_2.pdf

- Years 1 – 5 use Red Rose Mastery in Maths as a scheme and programme to support learning, teaching and planning
- Year 6 use LCC Maths Team Unit of study

Differentiation

Using Assessment for Learning (daily ongoing assessments) and Summative Assessments (tests), identification of need is ascertained and provided for.

Daily lessons are planned and delivered meeting individual, group and cohort ability and need with additional interventions provided as needed in order to bridge gaps in learning.

Additional support and intervention programmes used in school include:

- Success@Arithmetic (KS2)
- FirstClass@Number (KS1)
- 5-minute Box

SEND

Pupils with Special Educational Needs and Disabilities are provided for to the same high quality as all. First quality teaching is used as well as additional support on 1:1 or groups basis. For those pupils who are not able to access the curriculum in their

year group, bespoke and tailored provision is given using question level analysis, PIVATS and through ascertaining their individual needs.

Resources

Each class has appropriate materials needed for day to day lessons. Each child/group within each class has a personal knowledge organiser which is built upon over the year adding to previous knowledge.

Impact

The STEAM Curriculum Team monitors and measures the impact of the implementations of the Mathematics curriculum in collaboration with class teachers and SLT through:

Assessment, Recording and Reporting

- Termly data analysis identifies additional needs, areas of weakness, strength, progress; this informs future planning both at class, key stage and whole school level
- Pupils are assessed on a day to day basis through Assessment for Learning, including through *Learning by Questions* and also termly using more formalised tests. These inform future plans.
- Termly assessing is based solely on what has been taught that term and not for the whole year. Pupils are identified as *working below*, *working at* or *working above* Age Related Expectation
- Data is collected each term and inputted onto the Lancashire Tracker which can be accessed by all teaching staff, including Curriculum Teams and overall Subject leader
- Parents and guardians are informed of termly progress through termly information reports, twice annually through Parent and Guardian Consultation meetings and annually through end of year reports.
- Parents and guardians are kept up to date between these times if staff identify any specific mathematical need requiring additional support

Equal Opportunities and Inclusion

All children are provided with equal access to the mathematics curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background.

Monitoring and Evaluating

The STEAM Curriculum Team, alongside SLT, is responsible for monitoring and evaluating the Mathematics curriculum. An annual monitoring cycle is in place which involves termly monitoring sessions involving planning and work scrutinies, pupil interviews, staff discourse, drop in sessions, formal observations by the HT, data analysis. All of which inform future planning as a curriculum team and subject development. Non-contact time is given for this.

Whole school moderation for mathematics takes place throughout the year.

Curriculum Team responsible: STEAM Team

Policy Written: November 2022

Policy Agreed by Governors: November 2022

Date to be reviewed: October 2023 or sooner in light of developing initiatives