



Maths Policy

Our Mission:

To create confident and independent learners who have the skills and knowledge needed to be the best that they can be and who serve each other in a loving Catholic community.

Our Intent:

At St. Teresa's, our aim is that all children can be successful in the study of mathematics. Maths is for everyone! We teach skills to ensure our children are resilient learners who realise the importance of mathematics in everyday life. We provide the pupils with a mathematics curriculum and high-quality teaching to produce individuals who are numerate, independent, inquisitive, enquiring and confident. We provide a stimulating environment and resources so that pupils can develop their mathematical skills to the full.

The 2014 National Curriculum for Maths aims to ensure that all children:

- Become fluent in the fundamentals of Mathematics
- Are able to reason mathematically
- Can solve problems by applying their Mathematics

At St. Teresa's, these skills are embedded within maths lessons and developed consistently over time. We are committed to ensuring that children are able to recognise the importance of maths and that they are able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts.

We ensure that our children are immersed in mathematical terminology and vocabulary: 'our golden thread' to develop and enhance their understanding of the subject of maths.

We want all children to enjoy mathematics and to experience success in the subject, with an ability in both arithmetic skills and to reason mathematically.

Our Implementation:

At St. Teresa's we use the National Curriculum for Mathematics (2014) as the basis of our mathematics programme. From this, we have developed 'Long Term Maths' Overviews' and 'Progression in Maths Skills' documents as the basis for our long-term and medium-term planning. We organise children into maths classes, maths sets and maths nurture groups where appropriate. We are committed to ensuring that all pupils master the key concepts of mathematics in order that they make progress and avoid gaps in their understanding that provide barriers to learning. As we have assessed the impact of the COVID pandemic on learning, long-term plans and our skills progression planning have been adapted accordingly.

St. Teresa's Calculation Policy, high-quality teaching and intervention work ensure continuity, progression and high expectations for all learners in mathematics. We extend, challenge and develop the needs of all learners from our school community. Assessment for Learning, an emphasis on basic skills, the development of mathematical thinking and problem solving and a rigorous approach to the development of teacher subject knowledge are essential components of the St. Teresa's Catholic Primary approach to the teaching of maths.

To provide adequate time for developing mathematics, maths is taught daily. Maths lessons may vary in length but will usually last for at least 60 minutes in both key stage one and key stage two classes. To help ensure that the gaps are plugged in knowledge and skills, due to the impact of the COVID pandemic, all classes now teach six maths lessons per week.

Each day children are also taught: -

- 'Basic Skills'

This is daily teaching time additional to maths lesson time. All classes have a daily 15-minute basic skills session that focuses on prior teaching, areas of misconception, key mathematical skills and areas of maths that involve regularly revisiting to ensure that knowledge is embedded.

In maths lessons, teachers provide opportunities for pupils to engage in:-

- the development of mental strategies
- written methods
- practical work

- investigative work
- problem solving
- mathematical discussion
- consolidation of basic skills and number facts
- maths games
- IT programs
- the use of a variety of manipulatives
- number rhymes and chants and
- reasoning opportunities
- the development, understanding of and application of mathematical vocabulary

Pupils are provided with a variety of opportunities to develop and extend their mathematical skills including:

- group work
- paired work
- whole class work and
- individual work

At St. Teresa's, in lessons we use a Concrete, Pictorial and Abstract approach to guide children through their understanding of mathematical processes. Revise and review consolidation lessons are used to revisit previous learning and to ensure maths skills are embedded; and weekly homework (from EYFS to year six) is set to develop and review children's learning. Teachers use accurate mathematical vocabulary in our teaching and children are expected to use this taught vocabulary in their verbal and written explanations. Children are given opportunities to apply and use mathematics in real contexts and time is found in other subjects for pupils to develop their numeracy skills, e.g. there are regular, carefully planned opportunities for measuring in science and technology, for the consideration of properties of shape and geometric patterns in technology and art, and for the collection, presentation and interpretation of data in history and geography.

At St. Teresa's, our mastery approach moves from fluency, with variation in fluency to reasoning to problem solving and evidence of all these approaches are found in children's books and folders. Teachers recognise that variation in questioning is essential to challenge and to progress children's learning. (There is a separate appendix detailing the approach of each class and/or set to problem solving.) Teachers plan regular problem solving and/or

investigational activities and opportunities into work to ensure that pupils develop the skills of mathematical thinking and enquiry.

Teachers at St. Teresa's endeavour at all times to set work that is challenging, motivating and encourages the pupils to think about how they learn and to talk about what they have been learning.

Assessment:

Formative Assessment

At St. Teresa's, teachers integrate the use of formative assessment strategies such as effective questioning, clear learning objectives, the use of success criteria and effective feedback and responses into their teaching. There is a separate Mathematics Marking Policy used to inform high quality feedback and pupils' responses in Mathematics.

Summative Assessment

Using end of unit tests, pupils are assessed and are given opportunities to consolidate learning where necessary. More formal assessments, from year two - across whole year groups takes place in spring and summer terms. The school's progress tracking system is updated termly.

Past national Curriculum tests are used at the end of key stage one and key stage two; teachers use these papers to inform their judgements as they prepare pupils for these assessments.

In year four, pupils take the national multiplication check.

Target Setting

Teachers set yearly individualised targets for each child. Throughout the course of the year, targets are addressed and children may be given access to intervention programmes or additional classroom support where needed. Targets are regularly discussed with senior leaders.

Target grids are kept in the front of maths exercise books. In year two, the ITAF grid is also used.

Early Years Foundation Stage (EYFS):

At St Teresa's, we were early adopters of the new EYFS framework, which became statutory in September 2021. To support our mathematical curriculum, we use Development Matters, the non-statutory guidance and our maths curriculum for EYFS. Both mathematical understanding and number sense are developed through stories and rhymes, songs, games, daily routines and during child-initiated play. As pupils progress, they are encouraged to record their mathematical thinking in a more formal way. Pupils are expected to have a

deep understanding of numbers up to 10, number bonds to 5, and some number bonds to 10, including double facts by the end of the Reception year. Direct mathematical teaching happens on a daily basis with sufficient time then given to practise and rehearse important processes and skills. The ELGs for Mathematics focuses on Number and Number Pattern, however, we offer rich opportunities to develop children's understanding of number, calculating, measurement, pattern and shape and space through structured and child-initiated activities, both indoors and out. This approach enables children to enjoy, explore, learn, practise and talk about their developing understanding of mathematics.

Our Impact:

At. St. Teresa's our pupils:

- have a well-developed sense of the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- use the facts they know by heart to figure out numbers and calculations mentally
- calculate accurately and efficiently, both mentally and on paper,
- draw on a range of calculation strategies
- make sense of number problems, including 'real' problems and identify the operations needed to solve them
- explain their methods and reasoning, using correct mathematical terms and vocabulary
- judge whether their answers are reasonable and have strategies for checking them where necessary
- suggest suitable units for measuring and make sensible estimates of measurements
- explain and make predictions from the numbers in graphs, diagrams, charts and tables
- develop spatial awareness and an understanding of the properties of 2D and 3D shapes

St. Teresa's Catholic Primary School has a supportive ethos and our approaches support the children in developing their collaborative and independent mathematical skills. Children at St. Teresa's have fluency in number and calculations and reason and problem solve with increased confidence and accuracy. Our maths curriculum and high-quality teaching ensures that all children experience challenge and success in mathematics. Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child. These factors ensure that we are able to maintain high standards in mathematics, with progress and achievement at the end of KS2 being significantly above the

national average and in the highest 20% of all schools and with a higher proportion of children than nationally demonstrating greater depth.

Maths Learning Environment

This is a separate appendix.

Correction and Marking Policy

This is a separate appendix.

Calculation Policy

This is a separate appendix.

Maths Vocabulary

This is a separate appendix.

Problem Solving in Maths Policy

This is a separate appendix