MATHEMATICS POLICY

Introduction

This policy outlines the aims, organisation and management for the teaching and learning of mathematics at St Mary and St Benedict Catholic Primary School.
It is based on the National Curriculum (2014)
This policy will be reviewed September 2027

Mission Statement

As a Catholic school, we recognise the dignity and uniqueness of every child as created in the image and likeness of God. We are committed to providing a nurturing, inclusive and aspirational learning environment where all children are encouraged to achieve their full potential.
Through the teaching of mathematics, we aim to develop confident, resilient and reflective learners who use their knowledge and skills responsibly and ethically in service of others and the wider community.
Our approach is underpinned by the principles of Catholic Social Teaching, including:

- **Human Dignity** – valuing and respecting every child as an individual learner;
- **The Common Good** – encouraging collaboration, teamwork and mutual support;
- **Participation** – ensuring all pupils are actively included in learning;
- **Solidarity** – supporting one another and celebrating shared success;
- **Preferential Option for the Poor and Vulnerable** – providing appropriate support and opportunities so every child can succeed;
- **Stewardship** – using resources responsibly and applying mathematics to care for God's world.

Aims

Mathematics is a life skill. It is an essential element of communication, widely used in society, both in everyday situations and in the world of work.

Our aims in teaching mathematics are:

- To become fluent in the fundamentals of mathematics
- To develop pupils' ability to apply mathematical skills with confidence and understanding when solving problems.
- To reason mathematically by following lines of enquiry and justifying conclusions
- To enable pupils to express themselves and their ideas using the language of mathematics with assurance.
- To develop positive attitudes to mathematics, recognising that mathematics can be both useful and enjoyable.
- To nurture a fascination and excitement of mathematics
- To be able to use and apply the skills in other curricular areas.
- To understand how mathematics can be used to contribute positively to society and the common good.

Teaching Mathematics

Organisation

Mathematics is taught daily in all year groups.
Teaching is structured through the **Busy Ant Maths** scheme, which provides progression across all strands of the mathematics curriculum.
Lessons are designed to build conceptual understanding through:

- concrete resources,
- pictorial representations,
- abstract methods,

- mathematical discussion and reasoning.

Teachers adapt lessons to meet the needs of their class while ensuring full curriculum coverage and progression.

Teaching strategies

In order to provide the children with active and stimulating learning experiences, a variety of teaching and learning opportunities are adopted:-

- Children may work individually on a task, in pairs or in a small group, depending on the nature of the activity.
- Wherever possible practical 'real' activities are used to introduce concepts and reinforce learning objectives.
- ICT is used where appropriate by teachers and pupils to support teaching and learning in Mathematics.
- Activities are planned to encourage the full and active participation of all pupils.
- Teachers place a strong emphasis on correct use of mathematical language; this is supported by key vocabulary being displayed.
- Teachers value pupils' oral contributions and create an ethos in which all children feel they can contribute.

Daily mathematics lessons typically include:

- retrieval and rehearsal of prior learning;
- teacher modelling and explicit instruction;
- guided practice;
- independent application;
- reasoning and problem-solving opportunities;
- opportunities for discussion using mathematical vocabulary.

Children are encouraged to explain their thinking, make connections and justify their methods. Teachers use a range of strategies including:

- questioning;
- partner talk;
- practical equipment and manipulatives;
- visual representations;
- targeted support and challenge.

Our mathematics teaching promotes perseverance, resilience, respect and collaboration, reflecting our Catholic ethos and values.

Curriculum Planning

Medium Term Planning

Teachers use The National Curriculum to plan teaching sequences that build learning over time. The emphasis is to develop a sequence of teaching and learning that encompasses the cycle of assess, plan, teach, practise, apply, and review through every unit. A strong emphasis on Reasoning and Problem Solving is embedded within the curriculum.

We follow the planning structure from the Collins Busy Ant Maths that organise the 7 strands of mathematics into 12 units across the year
Links and connections between the strands of mathematics are made within the units.
Each unit consists of 3 weeks of teaching

Short term planning

- The Busy Ant weekly plan is used by staff to plan learning over a series of lessons. Each teacher has access to Busy Ant daily lesson plans which are adapted to the needs of each class.
- Teachers evaluate units of work, making notes on pupils who have exceeded or not achieved expectations.

Assessment, recording and reporting

Assessment is an integral part of teaching and learning in mathematics.

Formative Assessment

Teachers assess pupils continuously during lessons through:

- questioning;
- observation;
- discussion;
- marking;
- review of independent work.

Assessment information is used to identify misconceptions, inform planning and provide timely intervention.

Summative Assessment

Assessment takes place through:

- end-of-unit assessments linked to the Busy Ant Maths programme;
- termly assessments;
- summer assessments to measure progress and attainment over the year.

Assessment outcomes are used to:

- monitor progress;
- identify pupils requiring additional support or challenge;
- inform future teaching;
- report attainment to parents and carers.

Inclusion

We believe all children can achieve in mathematics and that every child should be given the opportunity to succeed.

Teaching is adapted to meet the needs of all learners through:

- differentiated support;
- scaffolding;
- practical resources;
- targeted interventions;
- adult support where appropriate;
- adaptive teaching strategies.

Children with SEND, disadvantaged pupils and pupils with English as an additional language are supported to access the full mathematics curriculum.

Higher attaining pupils are challenged through greater depth reasoning, investigation and problem-solving activities.

In line with Catholic Social Teaching, we are committed to inclusion, fairness and ensuring that all pupils feel valued, supported and able to participate fully in learning.

Early Years Foundation Stage (EYFS)

In the Early Years, mathematics is taught through practical, engaging and play-based experiences in line with the EYFS Framework.

Children develop understanding in:

- number,
- numerical patterns,
- counting,
- comparison,
- shape,
- space and measure.

Opportunities for mathematical learning are embedded throughout the indoor and outdoor environment.

Calculation Policy

The school follows a progressive calculation policy to ensure consistency in the teaching of written and mental methods across all year groups.

Children are taught:

- efficient mental strategies;
- formal written methods;
- the use of concrete and pictorial representations before abstract recording.

Use of Mathematical Vocabulary

The development of mathematical language is central to our teaching.

Teachers:

- model accurate mathematical vocabulary;
- encourage pupils to explain reasoning verbally;
- provide opportunities for discussion and debate;
- support children in using sentence stems and mathematical explanations.

Environment

It is important that the classroom environment supports both the learning and teaching of mathematics.

The school aims to provide a mathematically stimulating environment:

- through the development and use of displays to support learning and teaching in a lesson or series of lessons.
- through interactive displays that promote mathematical thinking and discussion
- through displays of pupils' work that celebrate achievement
- by providing a good range of resources for teacher and pupil use.

In every classroom, resources such as number lines, hundred square, place value charts and multiplication squares are displayed as appropriate and used for whole class or individual work.

Home Learning

We recognise the importance of making links between home and school and encourage parental involvement with the learning of mathematics through workshops and open afternoons. Where appropriate, mathematics home learning may be provided:

- to practise and consolidate their skills and knowledge,
- to develop and extend their techniques and strategies, and
- to share their mathematical work with their family
- to prepare for their future learning.

Equal Opportunities

- All pupils will have equal access to the mathematics curriculum regardless of gender, ethnicity, disability, religion, cultural background or attainment level.

Safeguarding

- All staff recognise that safeguarding and promoting the welfare of children is everyone's responsibility. Mathematics lessons should provide a safe, supportive and inclusive learning environment