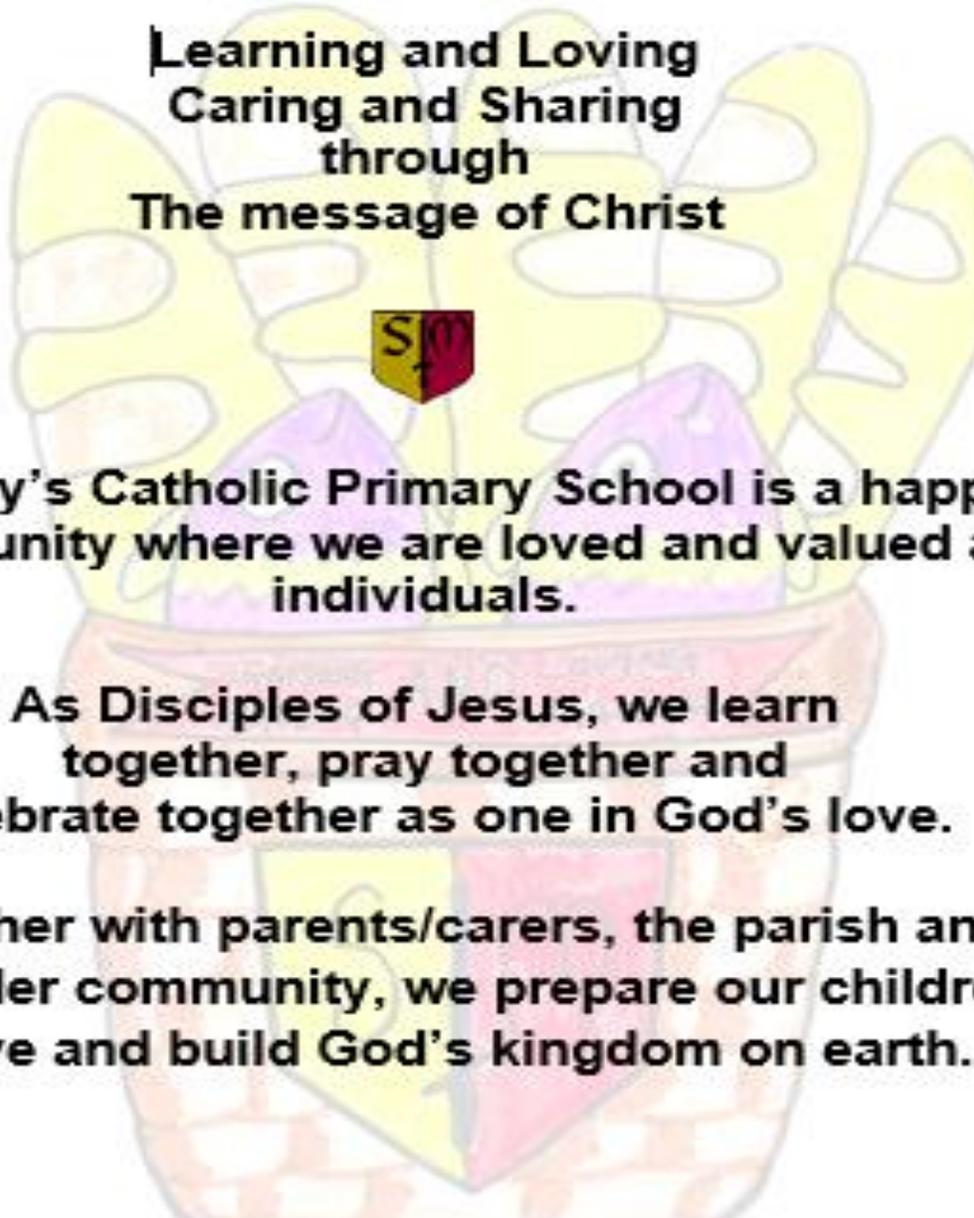


St Mary's Catholic Primary School



Key Stage Two Mathematics Policy



**Learning and Loving
Caring and Sharing
through
The message of Christ**

**St Mary's Catholic Primary School is a happy
community where we are loved and valued as
individuals.**

**As Disciples of Jesus, we learn
together, pray together and
celebrate together as one in God's love.**

**Together with parents/carers, the parish and
the wider community, we prepare our children
to live and build God's kingdom on earth.**

Mathematics Policy

ST. Mary's Catholic Primary School

MATHEMATICS POLICY.

Our school policy is that every child will be taught Maths in an environment which reflects the Church's teachings of love, tolerance and respect and will be helped to reach their full potential in Mathematics.

1 Aims and objectives

Mathematics teaches us how to make sense of the world around us through developing a child's ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

1 The aims of mathematics are:

- to promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion;
- to promote confidence and competence with numbers and the number system;
- to develop the ability to solve problems through decision-making and reasoning in a range of contexts;
- to develop a practical understanding of the ways in which information is gathered and presented;
- to explore features of shape and space, and develop measuring skills in a range of contexts;
- to understand the importance of mathematics in everyday life.

2 Teaching and learning style

At St Marys, we provide a 'growth mindset culture' and encourage children to use growth mindset vocabulary throughout focus Maths sessions. Children are encouraged to apply their learning powers such as 'don't give up' which help to develop confidence and focus whilst solving fluency and reasoning problems. A learning zone target board is shared with children which allows for children to share the zone in which they feel they are working e.g. 'comfort zone'. This allows for support to be offered or extension tasks to be provided to allow for all children to gain an understanding of the concept

2.1 Curriculum for Wales and The Four Purposes

As a new curriculum is due to be statutory as of September 2022, St Mary's has begun to trial a 'mastery' approach to the teaching of Maths. This is in line with the draft curriculum released in 2019. We have used the White Rose Scheme of Work as a template and have embedded lots of new strategies such as ten frames, bar modelling and part, part, whole models. The White Rose Scheme of Work allows for effective teaching of daily fluency, problem solving and reasoning activities.

We have begun to implement the 4 purposes; 'ambitious, capable learners, enterprising, creative contributors, healthy, confident individuals and ethical, informed citizens' throughout the planning for Maths. This is highlighted in weekly and Challenge Box planning.

The school uses a variety of teaching and learning styles in mathematics lessons. Our principal aim is to develop children's knowledge, skills and understanding in mathematics. They have the opportunity to use a wide range of resources such as number lines, number squares, digit cards and small apparatus to support their work. Children use ICT in mathematics lessons where it will enhance their learning, as in modelling ideas and methods. Wherever possible, we encourage the children to use and apply their learning in everyday situations.

2.2 We provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child.

We achieve this through a range of strategies – in some lessons through differentiated group work, and in other lessons by organising the children to work in talking partners and groups on open-ended problems or games. Through a cycle of assessment, planning and delivery we aim to ensure continuity, progression, breadth and balance.

3 Mathematics curriculum planning

3.1 Mathematics is a core subject in the National Curriculum, and we use the National Curriculum requirement, LNF Framework in conjunction with the Abacus scheme as the basis for implementing the statutory requirements of the programme of study for mathematics.

3.2 We carry out the curriculum planning in mathematics in three phases (long-term, medium-term and short-term). These are presently being re-written to bring them in line with the Literacy and Numeracy Framework.

3.3 Our medium-term mathematics plans, which are adopted from the Abacus scheme which give details of the main teaching objectives for each term, define what we teach. They ensure an appropriate balance and distribution of work across each term. These plans are kept and reviewed by the subject leader and modified where necessary.

3.4 It is the KS2 planning teams that complete the weekly plans for the teaching of mathematics. These weekly plans list the specific learning objectives for each lesson and give details of how the lessons are to be taught. Based around the Abacus Scheme. The class teacher keeps these individual plans, and the class teacher and subject leader often discuss them on an informal basis.

4 Literacy and Numeracy Framework Implications

4.1 English

Mathematics contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. For example, we encourage children to read and interpret problems in order to identify the mathematics involved. The children explain and present their work to others during plenary sessions.

KS 2 children encounter mathematical vocabulary, graphs and charts when using non-fiction texts.

4.2 Information and communication technology (ICT)

Children use and apply mathematics in a variety of ways wherever it can be used to meet the objectives of the particular lesson.

4.3 Personal, social and health education (PSHE) and citizenship

Mathematics contributes to the teaching of personal, social and health education, and citizenship. The work that children do outside their normal lessons encourages independent study and helps them to become increasingly responsible for their own learning. The planned activities that children do within the classroom encourage them to work together and respect each other's views. We present children with real-life situations in their work on the spending of money and we have linked this to the Year 6 pupils running the Credit Union Saving Scheme. Good numeracy skills are essential for young people to take a full and active part in our society.

4.4 Spiritual, moral, social and cultural development

The teaching of mathematics supports the social development of our children through the way we expect them to work with each other in lessons. We group children so that they work together, and we give them the chance to discuss their ideas and results.

4.5 Equal opportunities

The mathematical curriculum is equally accessible and meaningful for diverse society and the contribution and esteem of each individual child will be positively enhanced - this aspect of our teaching is an integral part of our teaching in a Catholic school – one of trust, help and co-operation.

5 Teaching mathematics to children with special needs

We teach mathematics to all children, whatever their ability. It is part of the school curriculum policy to provide a broad and balanced education to all children. Work in mathematics takes into account the targets set for individual children in their Individual Education Plans (IEPs) which also applies to More Able and Talented.

Equal Opportunities

In St Mary's, we have carefully considered and analysed the impact of this policy on equality and the possible implications for pupils with protected characteristics, as part of our commitment to meet the Public Sector Equality Duty requirement to have due regard to the need to eliminate discrimination, advance equality of opportunity and foster good relationships.

Equality of opportunities is always observed with positive attitudes to mathematical development being developed irrespective of disability, gender, race, ethnic origin, culture, language or religion.

6 Organisation.

In KS2 the daily mathematics lesson lasts for approximately one hour. It works on the basis of Explore, Reflect and Improve. It may take the form of a whole class lesson or pupils working in groups on challenge boxes and tasks.

7 Assessment and recording

7.1 We assess children's work in mathematics from three aspects (long-term, short-term and medium-term). We make short-term assessments which we use to help us adjust our daily plans. These short-term assessments are closely matched to the intended skills. Children assess their own level of understanding against through self evaluation after each lesson. Children take responsibility for their learning by setting their own targets.

7.2 We make medium-term assessments to measure progress against the key skills, and to help us plan the next unit of work. We have a robust system to track pupils' progress and staff are given specific dates for these to be completed. SMT track levels of progress and have meetings with staff to review all pupils during target setting week.

7.3 We make long-term assessments towards the end of the school year, and we use these to assess progress against school and national targets. We can then set targets for the next school year and make a summary of each child's progress before reporting to and discussing with parents. We pass this information on to the next teacher at the end of the year, so that s/he can plan for the new school year.

7.4 Pupils will be undertaking the new Numeracy tests in May/June in both number and reasoning. The results are used to track the pupils and cross reference with our own data. We carry out diagnostic analysis of each test to highlight areas of strength and concerns whether it be pupil or class or even year groups.

8 Resources

There is a range of resources to support the teaching of mathematics across the school. All classrooms have a white board and a wide range of appropriate small apparatus.

9 Monitoring and review

The monitoring of the standards and of the quality of teaching in mathematics is the responsibility of the AOL team.

As a team they meet to research current trends and use this to decided the future direction of maths throughout the school.

Teachers review the standards of work in their live feedback on a daily basis. The SMT together with a governor, GWE representative and a member of FP and KS2 staff hold regular 'Listening to Learners' sessions with groups of children in classes to talk about their learning, the challenge, the standards and the engagement.

The work of the mathematics AoL team also involves supporting colleagues in the teaching of mathematics, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school.

Policy Updated May 2019 KO'Toole