

Maths Policy

[Matthew 13:23](#)

As for what was sown on good soil, this is the one who hears the word and understands it. He indeed bears fruit and yields, in one case a hundredfold, in another sixty, and in another thirty.”



'Feeding Hearts and Minds'

The peace, joy and love of Christ is at the heart of all that we do in our school. Through religious education, school policy and, primarily, our culture of prayerfulness, charity and joy, we seek to share the Gospel with our families, our parish, our community and the wider world.

Using the example of Jesus Christ, we cultivate the skills of heart and mind that allow us to develop our talents and take a shared responsibility for ourselves, each other and the world He gave us. We profess our faith proudly and recognise that we are called to a loving relationship with God through the sacraments, scripture and prayer.

Our school is animated by love and our shared faith and clear values drive our behaviour and our relationships; we are tolerant and respectful of the unique value of each person. Our individual needs and talents are recognised and nurtured in a warm, inclusive environment where we are able to use our gifts for the glory of God and in loving service of others.

We have excellent role models who empower us to believe in ourselves and provide us with an outstanding education and a wide range of opportunities – our aspirations for the future are high and we believe that through God's grace we can grow, learn and realise our full potential.

This policy was developed as part of a consultation process involving pupils, staff, parents and Governors of The Blessed Sacrament Catholic Primary School, based on best practice advice from Lancashire County Council.

This policy should be read in conjunction with the following documents:

- Teaching and Learning Policy
- Marking and Feedback Policy
- Handwriting Policy (Appendix A)
- Assessment Policy
- Inclusion Policies

Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them.

This policy outlines what we are aiming to achieve in respect of pupils' mathematical education. It also describes our agreed approach to the planning, delivery and assessment of the mathematics' curriculum.

The National Curriculum (2014) for mathematics describes what must be taught in each key stage. The mathematics taught and the methods used reflect both the statutory requirements and the non-statutory guidance and recommendations outlined in the following documents:

- (A) The Revised Statutory Framework for the EYFS (2012)
- (B) The Development Matters in the EYFS (2012)
- (C) Mathematics Programmes of Study: key stages 1 and 2 National Curriculum in England (2013)
- (D) Mathematics Planning National Curriculum documentation – Lancashire County Council (2013)

This policy provides information and guidance for staff, governors and other interested persons.

MATHS STATEMENT OF INTENT

Our aim is for all children to think mathematically, enabling them to reason, solve problems and assess risk in a range of contexts. Children can experience a sense of awe and wonder as they solve a problem for the first time, discover different solutions and make links between different areas of mathematics.

The curriculum provides pupils with a deep understanding of the subject through a concrete, pictorial and abstract approach. This ensures pupils fully understand what they are learning.

At The Blessed Sacrament Catholic Primary School we aim to present a mathematics curriculum that is:

- Relevant to the pupil's experience
- Meaningful
- Accessible
- Practical
- Challenging
- Achievable
- Enjoyable

The mathematics curriculum provides pupils with a strong level of mathematical fluency and a deep, long-term, secure and adaptable understanding of mathematics. It enables pupils to become resilient in solving non-routine mathematic problems and enjoy challenging mathematics and acquiring new mathematical skills, representations and thinking.

At The Blessed Sacrament Catholic Primary School we endeavour to ensure all children develop a positive and enthusiastic attitude towards mathematics that will remain with them throughout their lives. We also aim to ensure children enjoy mathematics learning and experience the enjoyment of playing with numbers and solving problems.

TEACHING AND LEARNING IN MATHS

The school uses a variety of teaching styles to cater for the different learning needs of pupils in mathematics lessons. Our principle aim is to develop children's knowledge, skills and understanding in mathematics. We do this through a daily lesson that has a high proportion of whole-class and group-direct teaching. During these lessons we encourage children to ask as well as answer mathematical questions. 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. Although the programmes of study of the National Curriculum (2014) are organised into distinct domains we believe as the National Curriculum states 'that pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasing sophisticated problems' (DFE, 2013:3) With this at the forefront of our teaching we ensure that using and applying mathematics is integrated into planning and teaching.

In all classes there are children of differing mathematical ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this in KS2 through a range of strategies such as through differentiated group work, different levels of support provided to groups and individuals and by organising the children to work in pairs on open-ended problems or games. In KS1 learning is pitched at the children's starting points. Tasks are scaffolded to support children to access the learning where needed and extension tasks are used to provide children that have demonstrated a secure understanding of the new learning with a deeper understanding of the concept.

We use teaching assistants to provide appropriate support to individuals or to groups of pupils. Teaching assistants within The Blessed Sacrament Catholic Primary School are viewed as an important 'asset' to the school and, as such, are appropriately involved in the planning and delivery of the mathematics curriculum. Their knowledge, skills and understanding are constantly updated through involvement in school-based and LA led INSET.

MATHS IN EYFS

Work undertaken within the Early Years Foundation Stage is guided by the requirements and recommendations set out in the Revised Statutory Framework for the EYFS (2017), the Development Matters in the EYFS (2012) and the Lancashire Planning Support Tools. We give all the children ample opportunity to develop their understanding of mathematics. We aim to do this through varied activities that allow them to use, enjoy, explore, practise and talk confidently about mathematics. Children explore mathematics through whole class teaching, consolidating learning through play in continuous provision, teacher led group work and outdoor activities. Evidence of work is recorded in a variety of ways, including observations, oral and written responses, photographs and the use of ICT.

MATHS IN KEY STAGE ONE

Each class in Key Stage One has a maths lesson each day. Key Stage One follow the Maths Mastery Programme developed by Lancashire Maths Consultants which follows the requirements of the National Curriculum for Key Stage One. The approach to Maths in Key Stage One is all about promoting a 'can do' attitude to maths. Pupils are encouraged that by working hard they will succeed. All pupils are supported to develop a deep understanding of the maths that they are learning so that future mathematical understanding can be built on solid foundations that do not need to be taught. The key ideas of each lesson are important to everyone, everyone starts at the same point. In Key stage One we work hard to ensure that children understand that mistakes are valued, making connections are important and that new learning may be hard, but struggle leads to success. A correct answer is not always seen as a measure of success. Children work in mixed ability groups with mixed ability talk partners to encourage a deeper understanding of mathematical concepts. Work is recorded in maths books that contain tasks designed to support and consolidate the learning of the lesson.

Key features of each lesson are:

- Initial problem
- Feedback from initial problem
- Guided learning
- Independent learning
- Deeper learning

MATHS IN KEY STAGE TWO

Maths in years three and four follows the mastery programme (Sept 2021), following the same principles as the mastery approach in key stage one. Maths in years five and six is taught every day for an hour. The school uses Lancashire's planning tools, which covers the requirements of the National Curriculum, in order to deliver appropriate, engaging and accurately pitched maths lessons. Lessons involve children practising their mental arithmetic skills therefore developing fluency, being involved in practical investigations using a wide variety of manipulatives to support understanding and using their knowledge of maths to support problem solving and reasoning. Children can work in ability or mixed ability groupings depending on the task and the learning involved. The lesson will begin with an activity to develop fluency and mental arithmetic followed by an initial problem related to the learning of the lesson. The teacher will model the learning and children will work on differentiated tasks where appropriate but be suitably challenged at all times. Work is recorded in individual maths books containing squared paper.

PLANNING FOR MATHS

Mathematics is a core subject in the National Curriculum, and we use the Mathematics Programmes of Study: key stages 1 and 2 National Curriculum in England (2013) and the Mathematics Planning National Curriculum documentation – Lancashire County Council (2014) as the basis for implementing the statutory requirements of the programme of study for mathematics.

We carry out the curriculum planning in mathematics in line with the structures and recommendations from LCC and have devised our own consistent planning documentation to reflect this. Our weekly plans list the specific learning objectives for each lesson and give details of how the lessons are to be taught.

The headteacher and mathematics subject leader are responsible for monitoring the mathematics planning within our school.

Key Stage One

Lesson design identifies:

- New mathematics to be taught
- Key points
- The difficult points
- Carefully sequenced journey through the learning
- Key vocabulary

The lesson includes:

- Modelling
- Back and forth interaction
- Questioning
- Short tasks
- Explanation
- Demonstration
- Discussion
- Immediate feedback where possible in line with school feedback and marking policy

Key Stage Two

Lesson identifies:

- Rational behind the learning of the lesson
- Revisit of previous learning to support retention of facts and methods
- Recap of Prior learning
- New mathematics to be taught
- Key vocabulary
- Concrete, pictorial abstract approach
- Misconceptions
- Progression of learning from starting points and through the lesson

The lesson includes:

- Modelling
- Back and forth interaction
- Questioning
- Independent tasks
- Discussion
- Immediate feedback where possible in line with school feedback and marking policy.
- When planning for maths teachers take into consideration our progression documents to ensure that learning builds on prior knowledge and that correct methods are taught at the correct time in the different year groups by sticking closely to the school's calculation policies.

ASSESSMENT IN MATHS

Assessment has two main purposes:

- assessment of learning (also known as summative assessment)
- assessment for learning (also known as formative assessment)

Assessment of learning is any assessment that summarises where learners are at a given point in time – it provides a snapshot of what has been learned. Within The Blessed Sacrament Catholic Primary School AoL is used appropriately, e.g. to provide a Teacher Assessment judgement at the end of KS1.

“Assessment for learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to get to and how best to get there.”

Assessment Reform Group, 2002

At The Blessed Sacrament Catholic Primary School we recognise that AfL lies at the heart of promoting learning and in raising standards of attainment. We further recognise that effective AfL depends crucially on actually using the information gained.

The school supports teacher assessment through the use of the Lancashire Learning and Progression Steps. These documents set out a progression of learning for individual strands of the National Curriculum towards end of year age related expectations.

The assessment procedures within our school encompass:

- Making ongoing assessments and responding appropriately to pupils during 'day-to-day' teaching. These 'immediate' responses are mainly verbal and are not normally recorded;
- Using knowledge of pupils drawn from ongoing pupil tracking records and pre learning assessment tasks to inform 'prior learning' at the beginning of each unit of work to guide our planning and teaching;
- Adjusting planning and teaching within units in response to pupils' performance;
- Use of ongoing teacher assessment in order to identify gaps in attainment and, at four assessment points in the year, using this information to judge each child's attainment against year group expectations;
- Use of information gained from statutory and internal school tests. Analysis is done at both a quantitative and qualitative level. Information gained is used to identify the group's and individual's strengths and areas for improvement and also to determine which strategies or methods are particularly effective in respect of specific areas of mathematics (the how and why).
 - We recognise the importance of responding to children's work, whether orally or in writing. We seek to encourage children by acknowledging positive achievements. This could include praise for use of a viable method even if the end results were incorrect. Children are provided with next steps to support and enhance their understanding and make links between previous and future learning. Children are given opportunities, and actively encouraged, to explain their work to others and to display their work when it seems appropriate. They are encouraged to value and respect the work of others.

RESOURCES

There is a range of resources to support the teaching of mathematics across the school. Staff are encouraged to use practical and visual models to support children's learning in mathematics. All classrooms have a wide range of appropriate practical apparatus alongside a range of software to support mathematics learning. There is also a central store of mathematics equipment that can be used.

PROFESSIONAL DEVELOPMENT AND TRAINING

The mathematics subject leader is responsible for ensuring that all staff are adequately trained to deliver the curriculum effectively. This may include organising CPD, leading staff meetings/INSET, sharing resources for planning and teaching, supporting colleagues, attending internal and external moderation meetings.

Staff are encouraged to speak with the Maths subject leader should they require any assistance or clarification in relation to their mathematics teaching.

HEALTH AND SAFETY

All staff are expected to be aware of any risks involved in any Maths activities. Teachers should plan appropriately, adhering to school and Lancashire policies for health and safety when using equipment and carrying out practical Maths tasks.

In addition to Health and Safety policies, Teachers are to take guidance from the 'BE SAFE' handbook (see STEM faculty lead).

Staff need to ensure all participants in the activity engage in the task safely. Pupils are taught to care for and use Maths equipment and resources correctly.

Any accidents or incidents should be reported promptly in line with school procedures.

ROLES AND RESPONSIBILITIES

CLASS TEACHER

- To plan engaging and inspiring maths lessons in line with school policy.
- To be responsible for keeping assessment documents for their class up to date.
- To maintain a weekly working wall for maths. The display should include: child initiated questions, relevant vocabulary, modelling, methods and relevant links to prior learning.

SUBJECT LEADER

- Ensure curriculum progression through the school.
- Monitor and review the Maths Curriculum, pupils' standards and teaching of the subject.
- Maintain resources, their storage and availability.
- Support and advise colleagues about Mathematics.
- Encourage and seek out staff development keeping staff informed of relevant courses and encouraging shared learning experiences.

HEADTEACHER

- Supporting members of the STEM faculty.
- Allocating the budget.

MONITORING AND EVALUATION

Maths will be monitored predominantly by the Maths subject leader however monitoring of the standards of children's work and of quality of teaching in mathematics is the responsibility of the headteacher and link governor supported by the subject leader.

Monitoring may take many forms including:

- Learning walks - to look for Maths around our school.
- Book scrutiny
- Planning/Assessment scrutiny
- Pupil voice
- Lesson observation

Feedback and evaluation

- Key strengths will be identified along with issues for attention.
- Any additional actions to be taken are noted on the maths action plan for that school year.
- Teaching of maths will be kept under regular review, as part of our on-going school development plans and monitoring the effectiveness of this policy.

INCLUSION

At The Blessed Sacrament Catholic Primary School we aim to provide a broad and balanced education to all pupils. Quality First Teaching is considered an entitlement for all pupils. Effective pupil tracking enables identification of pupils who may benefit from early 'intervention' at an appropriate level, i.e. Wave 2 or Wave 3.

We also recognise, and aim to make provision for, pupils who have a particular ability in mathematics.

It is the responsibility of all teachers to ensure that all pupils, irrespective of gender, ability, including gifted pupils, ethnicity and social circumstance, have access to the curriculum and make the greatest progress possible.

SEND PUPILS

The School's Policy document for Special Educational Needs explains in full the procedures which are in place for providing for pupils with Special Educational Needs. Within Maths, activities will be differentiated to take account of children's individual starting points and the support or scaffold that they may need in order to be able to access similar work to everyone else.

CHILDREN WORKING ABOVE AGE RELATED EXPECTATIONS

Pupils working above age related expectations will benefit from a curriculum which offers challenge and opportunities to deepen and extend their learning.

EAL PUPILS

Pupils with English as Additional Language may need support with mathematical language and vocabulary to access the curriculum. They may need flexibility in recording methods eg visual (pictures/photographs), access to translation sites, individual teaching of key vocabulary.

MOBILE PUPILS

The school has a number of children who enter at year groups other than Reception. These children are given full access to the Maths curriculum and given the same opportunities as all. Teachers will need to be aware of ensuring any gaps in prior knowledge are identified and filled.



Mathematics Policy

April 2021

The implementation of this policy will be monitored by the Maths subject Leader in consultation with the Stem Faculty Leader

This policy will be reviewed as appropriate by the FCC committee on behalf of The Governing Body.

Intended Policy Review Date – April 2021

Approved by: _____ (Headteacher)

Date: _____

Approved by: _____ (Governor)

Date: _____