Baines' Endowed Church of England Primary Academy

Mathematics Policy

At Baines' Endowed Church of England Primary Academy, we aim to develop self-belief and self-confidence in all our pupils and staff, through our mission that:

"With God, nothing is impossible" Luke 1:37

To support our pupils, staff, parents and governors in their quest to achieve the 'impossible', we will teach, guide and nurture our community in the following twelve values:

generosity	compassion	courage	forgiveness
friendship	respect	thankfulness	trust
perseverance	justice	service	truthfulness

At Baines' Endowed, we believe that by valuing all God's children and teaching them to learn, develop and grow in the Gospel values, we will allow them the opportunity to believe that, with the help and love of God the Father, God the Son and God the Holy Spirit, they can achieve what they aim to achieve.

Intent

The 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 develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- 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

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should

always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on. Children who are not working within their year group follow an adapted curriculum tailored to their needs.

Implementation

Our school uses the national curriculum requirements for Maths as the basis of curriculum planning. We have adopted a Mastery Approach to Maths to meet the needs of our children and follow PowerMaths throughout the school. We plan our curriculum in three phases:

1. We agree a long-term plan for each key stage. This indicates what areas are to be taught in each term, and to which groups of children. This is not strictly followed as some units need additional teaching time due to being key objectives for the year group but the expectation is that all National Curriculum objectives are taught over the course of the year. We review this long-term plan on an annual basis at the end of the Summer term. Future plans are then adapted based on the outcomes of the Ready to Progress criteria, which outline the essential skills needed to be ready for the following year.
2. We follow Power Maths unit plans to create a medium term plan for each unit of study.
3. Our short-term plans are those that our teachers write on a weekly or daily basis. We use these to set out the learning objectives for each small step, and to identify what resources and adaptation is needed. Our rigorous approach to Assessment For Learning allows teachers to decide how long to spend on each small step. Planning is routinely adapted to ensure that children are secure in the Ready To Progress criteria, meaning that more time is spent on some objectives than others.
4. In January 2026, we implemented Mastering Number in Y1,2,4 and 5, which is a sequential program aimed at plugging gaps in children's number skills. This is taught every afternoon. Year 3 uses their session to focus on developing times tables knowledge. It is expected that this will have a major impact on children's recall of number facts and the repeated use of stem sentences will help to embed children's knowledge of key mathematical concepts.

All plans are readily available from each class teacher and on the shared server and are monitored by the subject leader and the SLT. Plans are also made available for support staff working in the classroom during the lesson as appropriate. Planning is used to set clear, achievable goals, it aims to ensure that work is well matched to pupils' abilities, experience and interests.

In the Early Years Foundation Stage we follow Development Matters, using resources from Mastering Number and White Rose. This helps develop a deeper understanding of number. We ensure that there is planned progression in all curriculum areas and this is based on children's interests and the continual evaluation and evolution of medium term plans. A daily, whole class maths input,

which is teacher led, is followed by continuous provision with all work taking the form of practical activities, where feedback is given verbally.

A variety of teaching styles and activities is encouraged across the school, in recognition of the different learning styles of the children, as well as their different abilities. Each class teacher takes responsibility for facilitating children's progress. They consult with the subject leader, the SENCO or other professional bodies as the need arises so that all children have access to the curriculum and are helped to develop.

Throughout the school pupils will experience individual, paired, group and whole class teaching in Maths, the balance of which rests with the class teacher/Senior Management. Every effort is made to ensure that work is carefully adapted and matched to the individual children or groups as appropriate (this adaptation may be in the form of different activities, different levels of adult support or different expected outcomes). Manipulatives are available for all children, all of the time and children are routinely taught to independently select appropriate equipment for a task.

Learning activities are sequenced to ensure continuity and progression. Learning may be by means of direct teaching to the whole class or working with small groups if more appropriate, or individual and independent work, for example:-

- Whole class teaching may be suitable for acquiring knowledge.
- Small group discussions may give opportunities for investigation work.
- Explaining their reasoning to a partner or to the class enables them to use Mathematical vocabulary correctly and develop their reasoning and problem solving skills.
- Role-play and simulation activities may help develop understanding and empathy.
- Individual activities, for example research or recording tasks, encourage independence.

IT supports the Maths curriculum. Children are able to use IT to both to research and gather knowledge, but also to present, amend and refine their work to enhance its quality. Examples of these are;

- Times Table Rock Stars
- Power Maths
- LBQ including independent study

Children in all key stages are asked to undertake weekly homework as part of their Maths work. This could involve completing specific tasks or more general research activities.

TEACHING STRATEGIES

A variety of teaching strategies are employed throughout the school for Maths, focusing on the 3 key areas of Mastery : Fluency, Reasoning and Problem Solving

FLUENCY

- At fluency level, children begin by using concrete apparatus and pictorial representations to support their learning as required.
- Children will learn the mechanics of a topic and develop their understanding by discussing their learning in small groups or with an adult.
- Children will develop familiarity with different representations of numbers, including place value counters (concrete and pictorial) and part whole models.
- Children will develop their ability to spot patterns and make links in Mathematics.
- Children will develop their mental maths skills, applying knowledge of number bonds and times tables to a variety of calculations.
- From Early Years onwards, all staff will model using correct mathematical vocabulary at all times, in conjunction with simpler language where appropriate, but always mindful of addressing misconceptions at an early stage before they become embedded.

REASONING

- At this stage, talk is crucial in developing the ability to explain their reasoning to others.
- Written work will involve children explaining and justifying their reasoning to show their understanding of a question.
- Reasoning tasks will include investigative opportunities such as True/False questions and 'Can you convince me' scenarios, developing childrens' ability to see links and to explain their own reasoning.
- Children will be encouraged to always use correct mathematical vocabulary when justifying their reasoning, both verbally and in written form.

PROBLEM SOLVING

- All children should be regularly exposed to problem solving activities - these are central to PowerMaths and are included in the Discover and Think Together activities which form a crucial part of each small step.
- This may be a whole class discussion involving modelling of problem solving skills - usually using the bar model approach - to allow children the opportunity to apply their mathematical skills to real life situations.
- Once children develop more confidence, they should all have the opportunity to tackle problem solving activities, regardless of their ability, both in small groups and individually.

- Teachers should model discussion around reasoning skills to develop confidence in children when tackling problems and then justifying their reasoning.

We have adapted our approach to focus on developing all children's reasoning skills. When teaching a new concept, we will have one or more lessons focusing very practically on ensuring children develop the key fluency skills needed. Then, each lesson will have a reasoning focus with adaptation for children who still require more fluency practice. Anchor questions are often used as part of our Assessment for Learning process to inform this adaptation, which will sometimes take place during a lesson dependent on children's responses and understanding. Each lesson includes rich discussion, with children frequently encouraged to verbally explain their reasoning.

The contribution of Maths to other subjects

English - Maths contributes to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. Children develop orally through discussing Mathematical questions or presenting their findings to the rest of the class.

Science – Maths teaching contributes to the teaching of Science in a variety of ways. The correlation between subjects is most evident in the use of graphs, collecting evidence, interpretation and pattern finding.

Computing - We use Maths in Computing teaching where appropriate; collecting data and programming are significant examples. Evidence may also be collected through observations using ICT equipment and software for analysing results.

Personal, social and health education (PSHE) and citizenship – Maths contributes significantly to the teaching of personal, social, citizenship and health education. During Maths children develop team-work investigative skills, working in a variety of ability and also social groups.

Spiritual, moral, social and cultural development - When teaching Maths, we contribute to the children's spiritual development where possible. Children learn about theories in the development of our world as well as an exploration into knowledge and understanding of our world.

Design Technology- Maths and Design Technology have many natural links and complement each other across the curriculum, such as shape and space.

Resourcing

The subject leaders have a budget for buying resources. The amount varies from year to year. As part of our commitment to a Mastery approach, we have committed

to spending a significant proportion of the Maths budget on manipulatives such as Dienes and place value counters. Each classroom should have a resource area where manipulatives are readily available and routinely used. The library also contains a good supply of topic books and software to support children's individual research.

Equal Opportunities & teaching children with additional need

For general details with regard to provision for children with additional need please see our agreed Special Educational Needs, Able, Gifted and Talented and Ethnic Minority Achievement Policies. All teaching and non-teaching staff are responsible for ensuring that all pupils irrespective of gender, ability, ethnicity and social circumstances, have access to the whole curriculum and opportunities to make the greatest possible progress in all areas of the curriculum whilst in our school.

The statutory inclusion statement of the National Curriculum requires staff to modify teaching and learning to give all pupils relevant and appropriately challenging work at each key stage.

We modify for less able children by

- choosing material from an early year group/key stage if appropriate.
- consolidating, reinforcing and generalising previous learning as well as introducing new knowledge, skills and understanding.
- using the National Curriculum as a resource for differentiation.
- focusing on a more limited range of elements within the syllabus if necessary.

We modify for more able pupils by

- choosing material from a later year group/key stage if appropriate.
- providing more open ended, investigative tasks.
- adding to the complexity of the tasks and concepts presented.
- using a wider and more demanding range of resources.
- using questioning to challenge rather than expecting them to produce more recorded work than other pupils.

Impact

As a result of our Maths teaching at Baines' Endowed, you will see;

- Engaged children who are all challenged.
- Confident children who can talk about Maths and about the links between mathematical topics.
- Lessons that use a variety of resources to support learning.

- Different representations of mathematical concepts.
- Learning that is tracked and monitored to ensure all children make good progress.

Skills

Pupils will:

- use acquired vocabulary in Maths lessons.
- possess the skills to use methods confidently and independently and show resilience when tackling problem solving.
- demonstrate the flexibility and fluidity to move between different contexts and representations of Maths.
- be given the opportunity to use Maths in different contexts, developing their ability to recognise relationships and make connections.

Review

The Maths leader is responsible for:

1. Sharing the coordination of Maths throughout the school; ensuring that the curriculum is developed in compliance with the National Curriculum and other relevant guidelines. Ensuring the curriculum provides appropriate opportunities and experiences to enhance standards of achievement in the subject.
2. Assessment and target setting for the subject.
3. Working to support staff and to extend their knowledge and expertise in delivering the subjects, ensuring provision for, and use of, IT is promoted through the subject. This includes ensuring that support staff are kept abreast of current teaching and learning strategies.
4. Ensuring that the curricular provision is regularly and systematically monitored reviewed and evaluated.
5. Ensuring that the evaluation leads to action in order to constantly enhance provision.
6. Keeping abreast of current developments by attending relevant in-service courses. Keeping colleagues informed of professional developments by sharing information gained.
7. Promoting parental interest and understanding of the school's provision and suggesting ways in which they can work in partnership with us.
8. Devising long and short term plans for the subjects, including budget forecasts.
9. Providing and organising suitable resources, ensuring that the resources are tidily boxed and labelled to make them accessible to staff. Ensuring the resource area stays tidy.
10. Providing an inventory of all resources, updating it annually and submitting it in February with bids for the following year's resources, this includes online learning platforms necessary for high quality teaching and learning.
11. Controlling and handling of the budget.

12. Organising and leading INSETs.
13. Leadership of a group when reviewing the curriculum.

Monitoring and Evaluation

Monitoring and evaluation is carried out to enhance the teaching and learning of Maths within our school. It is the responsibility of all staff to monitor and evaluate the curriculum provision made for Maths within their own classroom in order that pupils make the greatest possible progress.

Gathering evidence of pupils' attainment is an integral part of teaching and learning. From this evidence teachers are able to: -

- Identify what has been taught and, more importantly, learnt.
- Monitor pupils' progress in acquiring the knowledge, understanding and skills in Maths.
- Monitor pupils' progress in cross-curricular elements.
- Establish pupils' needs as a basis for future planning and teaching.

Formal or informal evaluations will be carried out at the end of each lesson by the class teacher, followed by a summative evaluation at the end of each unit of learning.

Teachers continually collect evidence of pupils' attainment in a variety of ways, including: -

- Observing a pupil at work, individually and in groups.
- Questioning, talking and listening to pupils.
- Considering materials produced by the pupils and discussing these with them.
- Marking children's work, following the school marking policy, which has a clear focus on assessment for learning and immediate feedback.
- Involving children in assessing their own work helps them understand better their own strengths and needs. It is vital in ensuring children know how to move forward in their learning, the next steps.
- PowerMaths End of Unit tests
- NFER tests
- Statutory SATS papers.
- All teacher assessment and test data is recorded using Sonar. This is used to inform reporting to parents, SLT and for intervention planning.

An evaluation of the overall curriculum (that the syllabus is fully implemented) is carried out by the subject leader, based upon information provided by teachers along with book and planning scrutinies.

An important element of the subject leaders' role is that of monitoring the effectiveness of provision in Maths. Pupils' progress and performance is evaluated taking account of factors, which may influence this, including teaching methods, resources, schemes of work and accommodation. All subject leaders maintain a subject file which contains the evidence and outcomes from their ongoing monitoring and evaluation.

Monitoring takes place in a number of ways:

- ♦ an analysis of teachers' planning

- assessment of recorded work and displays
- classroom observation, if and when appropriate
- discussion with individuals or groups of children
- discussion with members of staff

Review

This policy will be reviewed annually or as appropriate, by teachers and governors, in consultation with the Headteacher. Policy last updated February 2026.

The Mathematics Policy at Baines Endowed C.E. Primary School will be reviewed and modified on a regular basis, at least every two years.

It is possible to add amendments to this document prior to a review and these will be incorporated into the next issue. To add comments please complete the information on this sheet, adding the date and signing where indicated.

Name of person responsible for this policy: Mr Henrys and Mr Fox.