St Barnabas C.E. Primary School

POLICY DOCUMENT

Title: Maths Policy
Reference and Source Document: Worcestershire County Guidelines
The key purpose: Guidance for Maths
Lead Staff Responsibility: Maths Subject Leader: Nikki Sheen
Governing Body Responsibility: Curriculum Team
Reviewing Cycle and next date: Annually. June 2026
Approved by Leadership Team on: June 2025
Approved by Governing Body on: June 2025

Inspire, Nurture and Achieve

We believe, as Jesus did that in our happy, purposeful and welcoming **Christian school** and pre-school **all** are **valued**, **encouraged** and **cared for**:

- **Inspire** each child to think and feel positively about themselves and others.
- **Nurture** each child so that they grow with others in a secure and happy environment; where they enjoy a wealth of opportunity and experience a love of learning.
- A place where **achievements** are celebrated and expectations are high for all.

This is underpinned through the understanding that in Jesus, **all** are welcome and unique and have a God given purpose and place in the world. Jesus inspires us that **all** people can flourish.

Matthew 19 v14

Jesus said, "Let the children come to me, and do not hinder them,
for the kingdom of heaven belongs to such as these."

We aim to:

Inspire *a positive approach to life and learning;*

Value and ***nurture*** *each child as an individual: developing* ***resilience****,* ***independence,*** *and an* ***understanding*** *of what they bring to the world;*

Create a rich, stimulating environment where ***achievements*** *are celebrated and* ***team work*** *and* ***co-operation*** *are expected;*

Promote ***high expectations*** *and* ***self-confidence*** *for each individual;*

Ensure each child strives towards ***excellence*** *supporting those who find learning difficult and challenging the most able children;*

Develop and foster ***motivation*** *for learning and* ***enthusiasm*** *for life;*

Promote a sense of ***belonging*** *and build outstanding* ***relationships*** *between school, home, church and the wider community.*

Help every child understand their ***unique purpose*** *and* ***place*** *in* ***God's world.***

1. Introduction:

At St. Barnabas CE Primary School, we see mathematics as a key life skill, and we aim to create confident and inquisitive mathematicians. This policy has been developed to ensure that our teaching of mathematics is underpinned by all three of the school's core values - to **inspire, nurture** and **achieve**.

2. Intent statement.

- We **inspire** the children to see the purpose of Maths in everyday life and how Maths is important for their future careers.
- We **nurture** the self-confidence and resilience of our children to become able mathematicians who can explain their thinking, use reasoning skills and solve problems.
- We strive for all children to **achieve** their full potential and experience success in mathematics. We aim for high standards of attainment and good progress for all learners.

3. Agreement date of Policy:

The policy was developed by the Subject Leader for Maths, reviewed by SLT in June 2025 and approved by Governors in June 2025.

4. Aims:

The National 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 programmes of study: Key stages 1 and 2 National Curriculum in England -September 2013)

We aim to:

- To promote confidence, resilience and competence by encouraging an 'I can do it!' attitude towards Maths.
- To promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion.
- To challenge children through high expectations and equip children with the skills needed to rise to the challenge.
- To have a 'deep' conceptual understanding of mathematics through carrying out practical activities, involving calculation, measurement, shape and space and statistics.
- To be able to use and apply mathematics across the curriculum and in real life.
- To describe and explain their thinking using correct mathematical vocabulary.

- To develop a good 'feel for number' through knowledge and understanding of numbers and the number system.
- To achieve fluency in mental mathematics and the four operations.
- To develop logical thinking and reasoning skills to solve problems in all areas of mathematics.

5. Curriculum Development and Organisation:

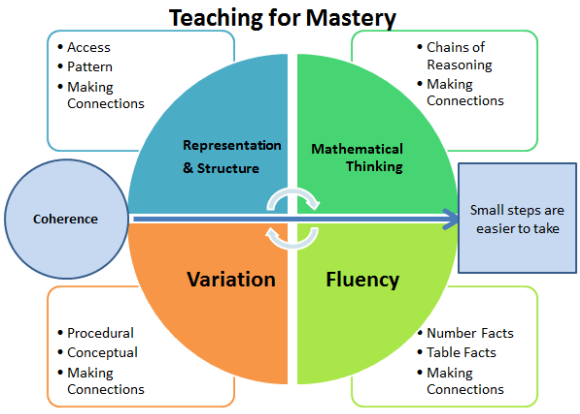
Mathematics is a core subject and at St Barnabas we follow the National Curriculum for Maths 2014 as the basis for implementing the statutory requirements of the programme of study for mathematics. We carry out the curriculum planning in mathematics in three phases (long-term, medium-term and short-term). We have a mapped-out progression of skills in each area of mathematics from Reception to Year 6. (See Appendix 1). As a school, we use White Rose Maths schemes of learning to support our planning.

Our medium-term plans identify the main teaching objectives for each term and ensure an appropriate balance of work throughout the year. Teachers follow the progression outlined by White Rose Hub for medium term planning.

Each class teacher completes daily plans for the teaching of mathematics. Problem solving and reasoning are integral in our day-to-day teaching. There is emphasis placed on promoting maths talk and children are encouraged to justify their thinking, using phrases like 'Convince me…, Prove to me… Explain to me…'Daily lessons include teacher modelling through 'My Turn Your Turn' to regularly revisit key skills. Mental maths skills are practised daily.

6. Teaching and Learning:

Each teacher uses a variety of teaching and learning styles in mathematics lessons. Our main aim is to develop children's knowledge, skill and a deep conceptual understanding. We aim to develop the children's understanding through adopting a CPA approach to teaching- concrete (using equipment), pictorial (using pictorial representations) to abstract. We adopt a mastery approach to teaching.



Mastery is…

- Achievable for all.
- The ability to build on something that has already been sufficiently mastered.
- Deep and sustained learning.
- The ability to reason about a concept and make connections.

There are three levels of learning:

- Shallow learning: surface, temporary, often lost.
- Deep learning: learning that can be recalled and used.
- Deepest learning: can be transferred and applied in different contexts.

The deep and deepest levels are what we are aiming for by teaching mathematics using the Mastery approach. A mathematical concept or skill has been mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations. Mastery is a journey and long-term goal, achieved through exploration, clarification, practice and application over time. At each stage of learning, children should be able to demonstrate a deep, conceptual understanding of the topic and be able to build on this over time.

Teaching for Mastery involves:

- High expectations for all children.
- Fewer topics covered in greater depth over a longer time.
- Number sense and place value coming first.
- Problem solving is central, ensuring an understanding of why it works so that children understand what they are doing rather than just learning rules.
- Challenge being provided through greater depth, rather than accelerated content (moving into next year's concepts) – this allows children to deepen their knowledge and improve their reasoning skills rather than accelerating on to new curriculum content.

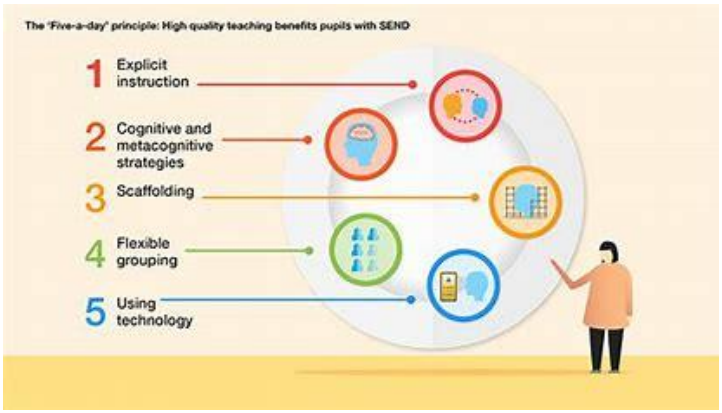
Children are asked to work independently, in pairs and in groups. The children work in mixed ability classes across all year groups, and we plan each lesson so that it offers challenge at different levels with no glass ceilings.

The children can use a wide range of resources such as Numicon, Base 10, place value counters, number lines/ squares, digit cards and small apparatus to support their work. Bar models are used as one form of pictorial representation. Children and teachers use ICT in mathematics lessons where it will enhance their learning, and to assist with modelling ideas and methods. Wherever possible, we encourage the children to use and apply their learning in everyday situations.

We place emphasis on learning a rapid recall of addition and subtraction and times tables facts. In Reception and Key Stage One we use GLOW Mastering Number to support the children to develop good number sense. We use Number Sense, a carefully researched structured programme to systematically teach factual fluency. As a school we subscribe to Times Tables Rockstars and Numbots to motivate the children to practise their quick recall of number facts.

7. Inclusion and Equal Opportunities:

All children are provided with equal access to the mathematics curriculum. It is part of our school policy to provide a broad and balanced education for all children. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background. Teachers use a range of open-ended questions that allow all children to take part. Teachers encourage children to use practical equipment and represent mathematics visually to deepen the children's understanding. We plan each lesson with 'tiered learning' and children are challenged according to their understanding of different concepts. The Education Endowment Funt recommend a set of five core practices that can support all pupils, including those with SEND.



Pupil progress is monitored to ensure all children achieve their full potential.

8. Subject Monitoring:

The Maths Team and Team Leaders are responsible for monitoring standards of children's work, the quality of teaching in mathematics and evaluating progress.

9. Roles and Responsibilities of the Maths Team:

- To oversee the teaching of mathematics across the school.
- To monitor the provision for mathematics by carrying out book trawls, lesson observations, learning walks and pupil conferences. These then inform Termly Action Plans which support the main priorities identified in the School Development Plan.
- To ensure all children are making progress by analysing the data for each Year Group and tracking the progress of specific children.
- To contribute to Pupil Progress Meetings and identify next steps for intervention for specific children.
- To promote adaptive teaching strategies in Maths to meet the needs of all learners
- To moderate work in mathematics with staff and ensuring judgements are accurate.
- To keep up to date with developments in mathematics teaching and share with staff.

- To contribute to INSET training of staff to further staff expertise and subject knowledge.
- To lead by example in the way of teaching in own classroom and supporting colleagues.
- To prepare policy documents, such as Maths Policy, Calculation Policy and Vocabulary Progression.
- To liaise with the Head Teacher, Deputy Head Teachers, Team Leaders and governors as appropriate.
- To make purchasing decisions based on identified needs.
- To liaise with the Maths Governor.
- To lead Maths Workshops for Parents/ Carers.

10. Pupil Assessment:

Assessment is regarded as an integral part of our teaching and learning and is a continuous process. Assessment is carried out through:

- Open ended questions.
- Opportunities for the children to explain, convince and prove.
- Observation of the children at work.
- Peer and self-assessment.
- Marking the children's work in line with our school Feedback Policy.
- Informal assessments that take place continually and teachers record the children not achieving/ exceeding expectations in a lesson on daily plans.
- Planned assessment tasks and White Rose End of Unit tests.
- Key Stage 2 fortnightly mental arithmetic tests.
- Times Tables Tests and practice Times Multiplication Check.
- Termly Smartgrade tests (Years 1-5) and regular practice SATs papers (Years 2 + 6).
- Number Sense tests

We use these assessments to inform our future planning and identify our children needing intervention. Attainment is recorded using ITrack to ensure children are making good progress and children's work is moderated in regular Team Meetings and with other local primary schools.

In September, each child's progress and prior attainment are considered before a target level is set for the end of the academic year.

We make the long-term assessments with the help of end-of-year tests and ongoing teacher assessments to assess the children's progress in line with ARE (age related expectation). Children are also formally assessed at Year 2 and Year 6 according to SATs tests and tasks. These SATs tests are in line with the National Curriculum.

Times tables are monitored through regular testing and we teach times tables in a systematic way with high profile placed on quick recall of all related tables facts and applying knowledge of known facts.

In Green Lane Pre-School and Reception we follow the EYFS Maths, from the Statutory framework 2021. Observations in child initiated, adult led play and focused tasks are made regularly and recorded using the Tapestry or practitioners records. Parents/Carers are also encouraged to send in observations from home. All these observations inform future planning and interventions. Data is regularly recorded and analysed throughout the year and discussed with Team leaders/SLT. At the end of Pre-School/ Reception a judgement is made as to which band children are working within and this is reported to Parents/Carers. In Reception, we make judgements against the ELG in the Number and Numerical Patterns strands of Maths. This information is sent to County and used to inform provision in the child's feeder school or Year 1.

11. The role of mathematics across the curriculum:

At St. Barnabas, we have a cross-curricular approach to teaching mathematics and our half termly Curriculum Plans outline cross curricular opportunities. These are shared with parents via our Year Group pages on our school website.

ICT is used when appropriate to support the children's learning in this subject. Children benefit from the use of a wealth of ICT resources such as: computers, digital cameras, visualisers, I-Pads, interactive whiteboards with digital projector, recording equipment etc. and opportunities are taken to develop their knowledge, skills and understanding.

All children have access to a wide range of maths games and activities. We provide leaflets for parents with links to useful websites to support the children's learning in mathematics. These are available on the Maths page of our school website.

We recognise the vital role of mathematics in developing the children's understanding of economic wellbeing and financial literacy. Through our mathematics curriculum, we aim to equip our children with the knowledge, skills and confidence to make informed financial decisions, understand the value of money and develop responsible attitudes towards spending, saving and budgeting. Economic wellbeing is embedded in our PSHE and Maths teaching through real-life contexts such as handling money, solving problems involving shopping, planning budgets and exploring different financial concepts.

12. Home / school links:

We see the relationship with parents as very important in supporting their children's mathematical skills. We involve the parents in their children's learning by: -

- Providing parents' evenings which give them verbal information on their child's progress and their 'next step' targets.
- Sharing curriculum plans.
- Writing an end of year report which outlines progress and attainment in mathematics.
- Providing meetings to inform parents on how we teach mathematics and how they can help.
- Providing leaflets with activities/ ideas and links to websites for maths opportunities at home.
- Giving opportunities for maths homework.

- Celebrating National Number Day and promoting positive attitudes to mathematics through inviting parents into school to enjoy learning with the children.
- Inviting parental guest speakers to talk about 'maths at work' to inspire the children and their future aspirations.

Date to be reviewed **June 2026**

Appendix 1- Progression of skills in Maths – Year R - 6

Appendix 2- Our School Calculation policy

Appendix 3- Maths vocabulary progression- Year R- 6