

### Faith, Family and Fascination

# **Maths Policy**

**Boutcher C.E. Primary School** 

Reviewed by:	Ed Avis
Last reviewed during:	Autumn 2025
Next review due by:	Autumn 2027

"Love one another. As I have loved you, so you must love one another."

John 13:34

#### **Mission Statement**

The Maths Policy will support the delivery of the Mission Statement. Maths takes place within the context of the Christian aims and ethos of Boutcher School as reflected by our Mission Statement.

"The aims and practice of Boutcher School seek to reflect the life and teachings of Jesus Christ as told in the Gospels. Jesus taught us, through His example of unconditional love and compassion, that we are all of equal value to God. Everyone is entitled to be regarded with dignity, fairness and respect. We strive to ensure that our school enshrines the values which Jesus taught us."

## The children at Boutcher discussed our Mission Statement and created their own interpretation of it.

"In our school everyone has the right to learn, the right to feel safe and the right to respect. They have the right to learn the good news of the Gospels and to know that God loves us all equally (whether we are rich or poor, young or old.)

We strive to live in the way that Jesus would want us to. We tell others Jesus's stories so that they can learn from them too and we try to set an example for other people in the way that we act. In all that we do we help each other and love others as Jesus would want us to.

Boutcher CE Primary School tries its best to remember that Jesus loves us, even when we make mistakes."

#### **SMSC Statement**

Through the teaching of Maths, children's SMSC is promoted and supported. We aim to prepare our children to maximise opportunities, develop their responsibility and enhance their experiences now and in the future.

Through lessons we promote our Boutcher values of Faith, Family and Fascination. We enable every child to develop and flourish in a loving and open environment in lessons. We actively promote the fundamental British Values as stated by the Government and design opportunities in the curriculum to do this. We want Maths to be an enjoyable subject where children are fascinated by the learning of themselves, others and the world around them. At the heart of our school, is a rich and diverse culture and community that we enjoy and celebrate. We seek opportunities to work with the local community, explore our local area, welcome visitors to the school, go on trips and take part in community events and projects.

For further information, see the SMSC Policy.

#### **Equal Opportunities and Inclusion**

In Maths, we are committed to promoting and providing all children with high expectations and an equal entitlement and opportunities regardless of race, gender, culture, class, SEN or disability. We aim to meet the needs of all our children by personalising our Maths curriculum, promoting inclusivity to fully engage and motivate all children. This involves providing opportunities for SEND children to receive support and/or scaffolding as well as challenging all children to take an active part in their learning and to achieve their potential.

#### **Aims and Objectives**

#### **National Curriculum Aims**

'Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.' (DfE 2013)

#### **Boutcher Aims**

Our intent is for every child to develop a deep, connected understanding of mathematics that enables them to reason, problem-solve and communicate effectively. We aim for all pupils to see themselves as capable mathematicians who enjoy challenge and success.

We promote teaching practices that result in sustained progress, enjoyment and independence. Our approach is grounded in research evidence on how children learn mathematics effectively and aims to build confident, reflective learners.

The impact of these aims is seen in children who are fluent, resilient and able to apply their mathematical knowledge in unfamiliar contexts with curiosity and accuracy.

#### Organisation, Planning and Delivery

#### Maths, No Problem!

We follow *Maths* — *No Problem!* (MNP), a DfE-approved mastery scheme. It supports the teaching of small, connected steps and the development of conceptual understanding through the Concrete–Pictorial–Abstract (CPA) approach.

Teachers may adapt planning or sequence lessons where professional judgement deems it appropriate. This flexibility ensures lessons meet the needs of each cohort while retaining a consistent mastery structure across the school.

Regular training is provided to build subject knowledge, consistency and confidence in delivering high-quality lessons.

#### **EYFS: Foundation Stage: Reception**

In Reception, the priority is for children to develop a deep and secure understanding of early mathematical concepts through hands-on, practical experiences. *Maths* — *No Problem!* Foundations provides structured play and exploration aligned with the EYFS Framework (2021).

Mathematical thinking is embedded across provision, with counting, comparing, pattern and shape integrated into continuous and adult-led learning. Concrete resources help children represent number, building strong mental models and early reasoning skills.

This is our first year using *Foundations*, and teachers may adapt or supplement materials with high-quality NCETM and Numberblocks resources to ensure rich, balanced provision.

#### Key Stage 1 and Key Stage 2

Problem solving, fluency and reasoning sit at the heart of the scheme. Lessons follow a four-part structure:

- 1. **Explore Task** pupils explore a problem collaboratively.
- 2. **New Learning** the teacher provides direct, precise instruction.
- 3. **Guided Practice** supported practice consolidates understanding.
- 4. **Independent Practice** pupils apply learning independently.

#### Key features:

- Concepts are introduced in small, connected steps to avoid cognitive overload.
- The CPA approach ensures abstract ideas are grounded in experience.
- Mental strategies and bar modelling strengthen problem-solving.
- Fluency and reasoning are continually revisited within and across units.

#### **Retrieval and Consolidation**

To ensure long-term retention, children complete daily *5-a-days* — short, low-stakes quizzes revisiting key knowledge and previously taught concepts. These strengthen recall, build automaticity and reduce cognitive load.

Retrieval is also woven through lessons via questioning and discussion. Teachers use responses to identify misconceptions and plan immediate or follow-up interventions. The result is pupils who can recall and apply prior knowledge efficiently, freeing up working memory for new learning.

#### **Developing Subject knowledge for Direct Instruction**

Teacher Guides within *Maths* — *No Problem!* outline the rationale and progression for each unit. Teachers prepare thoroughly to understand the small steps of learning and the reasoning behind them.

Strong subject knowledge enables clear, confident instruction and effective use of the CPA model. Teachers' explanations should be concise, accurate and engaging, with consistent vocabulary and representation used across the school.

#### **High Expectations**

All teachers hold high expectations for every child's learning and engagement. Precise mathematical vocabulary is explicitly taught and modelled. Questioning is used to maximise participation — for example, a "no hands-up" approach may be used or the use of mini-whiteboards to gather whole-class responses.

Where children have not yet secured understanding, teachers respond promptly through immediate feedback, small-group support or additional practice tasks.

#### Resources

Each classroom is equipped with appropriate concrete and pictorial materials such as tens frames, number lines, cubes, counters, shapes and measuring tools. Shared resources (e.g. scales, trundle wheels, cylinders) are stored centrally.

The coordinator audits and updates resources regularly, ensuring they support progression, inclusivity and sustainability.

#### **Marking and Feedback**

Feedback is immediate, manageable and meaningful. Lessons are responsive: teachers adjust pace or scaffolding based on in-lesson assessment.

Effective questioning provides instant insight into understanding. Feedback may be verbal or written and should occur as close as possible to the point of learning.

Children are encouraged to self-check and correct where possible. Teachers distinguish between slips (simple errors) and misconceptions (gaps in understanding). Slips are indicated for correction; misconceptions inform future teaching or targeted intervention.

Marking supports independent learning by celebrating success and identifying next steps. Excessive written marking is avoided; time is prioritised for planning and responsive teaching.

#### **Progress and Assessment**

#### **Formative Assessment**

Teachers note recurring **conceptual error** patterns (by pupil and whole-class) and use them to plan same-day/next-day interventions where possible, or adapt sequences, and seed targeted items into 5-a-days; **slips** are corrected immediately and not over-weighted in judgement.

Teachers continually assess understanding through observation, questioning and pupil dialogue. Responses in *5-a-days*, guided practice and independent work inform next steps.

#### **Summative Assessment**

Termly assessments are used to monitor progress and inform planning.

• Autumn: PUMA tests

• Spring and Summer: Maths — No Problem! assessments

Outcomes, combined with teacher knowledge, help determine whether pupils are working below, towards, at or above age-related expectations.

Assessments are moderated within year teams and across phases to ensure consistency. Patterns identified through assessment inform curriculum development and CPD priorities.

Parents receive updates on attainment, progress and attitude each term.

#### **Display and Celebration**

Mathematics displays showcase reasoning, representations and problem solving from all year groups. They celebrate progress, promote curiosity and model the correct use of vocabulary, bar models and manipulatives.

Displays make learning visible and build confidence by valuing every child's contribution.

#### **Observations and Modelled Lessons**

The Maths Coordinator observes maths lessons periodically through full observations or learning walks. These support teacher development and ensure policy consistency.

Where needed, the coordinator models lessons for colleagues, particularly for new teachers, or provides coaching linked to NCETM and *Maths* — *No Problem!* training.

#### **Monitoring by the Governors**

Governors take part in learning walks with a maths focus on rotation, visiting classes and discussing standards and progress with staff and pupils.

The coordinator reports to governors on attainment, pupil engagement and subject development. Monitoring ensures the subject remains well-resourced, consistent and ambitious for all learners.

#### **Cross-curricular Skills and Links**

Mathematics underpins many subjects and real-life contexts. We plan meaningful links where beneficial — for example:

- coordinates and scale in geography
- pattern and proportion in art and design
- data analysis in science
- measurement in DT and PE

These connections help children see mathematics as purposeful and universal.

#### Role and Responsibility of Coordinator

The coordinator leads the subject by:

- supporting staff through advice, CPD and planning guidance
- monitoring teaching, assessment and pupil outcomes
- sharing current research and NCETM updates
- analysing data to inform priorities and training

Regular feedback and collaboration ensure continual improvement in teaching and learning.

#### **Homework**

**Numbots** – From Reception onwards, children use Numbots to build fluency in number bonds and basic facts. Pupils are encouraged to achieve three stars at each level to secure automaticity.

**Times Tables Rock Stars** – Pupils develop recall of multiplication and division facts, aligned to national expectations (Y2: 2,5,10; Y3: 3,4,8; Y4: up to 12×12). Teachers promote daily practice and parental involvement to ensure fluency.

#### **Plan for Unforeseen School Closure**

In the event of school closure, teachers continue to deliver maths lessons aligned with the curriculum overview. Lessons and activities are adapted for home learning via online platforms.

Please see the Remote Learning Policy for further information.

#### **Promoting Diversity in Maths**

At Boutcher, we have always been committed to providing all children with an equal entitlement to activities and opportunities regardless of race, gender, culture or class.

We want all children to feel they are positively represented and have opportunities to find out and explore the lives of significant individuals that have made an impact in the world we live in. For BAME children, this may be learning about prominent figures and their influence from people from a range of countries and places. We want children to see themselves as the future and be equipped with the necessary skills and knowledge from the wider world. If children have the self-belief and determination, they will achieve greatness.

In terms of Maths, we want all children to feel valued and positively represented.

In Maths lessons children are regularly reminded that we respect all people, beliefs and cultures and that disrespect and derogatory views are not tolerated. If children share views that cause concern, these should be written on the appropriate forms and handed to the Headteacher. If teacher's feel uncomfortable in discussions or when planning lessons, they should speak to the Maths coordinator for support.