

Maths Policy

Brize Norton Primary School

We SHINE for ourselves and each other with
kindness.

Strive, Help, Inspire, Nurture, Excel

Adopted by school LGB:	Brize Norton Primary School
Date:	May 2026
Review Date:	May 2029

Intent:

At Brize Norton Primary School we aim to equip every child with the mathematical knowledge, fluency, reasoning skills, and confidence needed to thrive both in school and in life beyond. Our curriculum intent follows the principles of Teaching for Mastery as outlined by the NCETM, which emphasises deep understanding, small-step progression, and equitable access for all learners.

Guided by our school values – Strive, Help, Inspire, Nurture, Excel (SHINE) – we aim to develop learners who:

- **Strive:** Show resilience and perseverance when tackling mathematical challenges.
- **Help:** Support one another through discussion, collaboration, and shared problem-solving.
- **Inspire:** Communicate mathematical ideas confidently, influencing and encouraging peers.
- **Nurture:** Grow their curiosity and confidence in a supportive environment.
- **Excel:** Reach their full potential through high-quality teaching and ambitious expectations.

The NCETM's structured, mastery-based approach ensures that mathematical concepts are taught progressively and coherently. These materials and progression frameworks support teachers in building secure conceptual knowledge across year groups and mathematical topics. Our children develop number sense, fluency, reasoning skills, and the ability to apply maths in meaningful contexts.

Implementation:

Mathematics is taught daily using a mastery approach that aligns with NCETM guidance. Lessons are carefully sequenced and designed to ensure deep, sustained learning for all pupils, with access to high-quality representations, small-step progression, and responsive assessment.

Teaching and Learning:

Lessons follow small steps, ensuring deep understanding before acceleration. Representations and structures recommended in NCETM mastery materials are used consistently to build conceptual understanding.

- Fluency practice is embedded daily (e.g., number facts, counting, times tables), through either early morning tasks or lessons starters. This links in with Brize Norton's approach to retrieval.
- Teachers use probing questions to develop reasoning and encourage mathematical dialogue.
- Problem-solving opportunities are built into lessons so children apply understanding in varied contexts. We use sentence stems to support children in explaining their knowledge.
- Children in Years 1, 2 and 3 are taught in their year groups. Children in Years 4, 5 and 6 are taught in their classes.

Mastering Number Programme (EYFS, KS1, and Y4–5)

We follow the **NCETM Mastering Number programme** to strengthen number sense and early fluency:

EYFS

- Our EYFS curriculum is **built around Mastering Number**, ensuring early number sense, cardinality, comparison, composition, pattern, and early calculation.
- To ensure full curriculum coverage, this is **complemented with selected White Rose EYFS materials**, particularly for **Shape, Space & Measures**, which sit outside the Mastering Number framework.
- This ensures a balanced approach, aligning NCETM early number progression with the broader EYFS framework.

KS1 (Years 1–2)

- All KS1 children take part in daily **Mastering Number sessions**, strengthening fluency, subitising, additive understanding, and number relationships.
- This aligns with national recommendations for early number fluency and supports secure progression towards mastery.

Years 4 & 5

- Brize Norton extends Mastering Number beyond KS1 using the **KS2 Number Sense and Multiplicative Reasoning** materials from the NCETM, ensuring older pupils strengthen multiplicative relationships, number facts, and mental fluency.
- This is particularly beneficial in mixed-age classes, providing structured fluency development consistent with NCETM small-step teaching.

Year 6 Consolidation

In Year 6, pupils receive a carefully designed programme of **consolidation and deepening** to ensure they enter secondary school with secure, confident mathematical understanding. This phase is not about accelerating through new content but about strengthening mastery of the full KS2 curriculum.

Year 6 consolidation includes:

- **Revisiting core concepts** such as place value, fractions, calculation strategies, ratio, and algebraic thinking to ensure fluency and confidence.
- **Structured reasoning activities** that support pupils in explaining, justifying, and proving their mathematical thinking.
- **Targeted small-group support** based on diagnostic assessment to close remaining gaps and reinforce key skills essential for KS3 readiness.
- **Application of mathematics in varied, rich contexts**, including multi-step problem-solving, investigations, and cross-curricular opportunities.
- **Strengthening arithmetic and number fluency**, ensuring pupils are secure in efficient written and mental methods.
- **Enhanced transition preparation**, including developing resilience,

independence, and readiness for secondary maths through exposure to extended tasks and reasoning challenges.

This approach complements the mastery journey across the school by providing a final year dedicated to securing foundations, deepening conceptual understanding, and ensuring every pupil moves forward confidently into Key Stage 3.

Benefits of Mixed-Age Planning

Mixed-age planning offers several advantages for teaching and learning, especially when supported by structured, mastery-based progression such as NCETM materials.

1. Reinforces and Revisits Key Knowledge

Mixed-age planning naturally requires teachers to revisit key concepts across age groups. This strengthens pupils' long-term understanding because important knowledge is encountered repeatedly and in slightly different contexts.

Brize Norton-aligned schools using NCETM and self-designed small-step sequences note that this approach helps pupils *to* re-visit and consolidate their knowledge.

2. Supports a Coherent Curriculum Across the School

Mixed-age planning works especially well with NCETM materials because mastery progression is built in small, logical steps. This ensures that learning is coherent, whether pupils encounter concepts at the younger or older end of the mixed-age class.

NCETM frameworks are designed to be flexible enough for use across year groups, enabling consistent teaching and shared models and representations.

3. Enables Personalised Learning at the Right Pace

Mixed-age classes naturally create variation in readiness. Mastery-based mixed-age planning allows:

- reinforcement for those who need more time;
 - depth and extension for those ready to explore sophisticated problems.
- This aligns with NCETM's "keep up, not catch up" approach, where children who grasp ideas quickly deepen understanding rather than accelerate to new content, and those who need more support receive timely intervention.

4. Encourages Collaboration and Peer Support

A mixed-age structure supports collaborative learning—older pupils can model language, strategies, and resilience, while younger pupils benefit from peer explanations. This reflects Brize Norton's **SHINE** ethos, where children work together to help, inspire, and nurture one another.

5. Builds Teacher Expertise and Flexibility

Mixed-age planning encourages teachers to develop a deep understanding of progression across multiple year groups. Schools using NCETM materials report that teachers benefit from structured planning sequences that support teaching across ages, improving professional knowledge and curriculum design.

6. Supports a Mastery Approach Across the School

Because mastery involves carefully structured steps that build over time, mixed-age planning aligns well with this approach. NCETM's progression materials help ensure all pupils work through a coherent journey, enabling secure foundational skills before moving on.

Schools applying mastery in mixed-age contexts specifically highlight that NCETM and White Rose style progression documents are effective for such planning

Inclusion and Support

Following NCETM principles, we adopt a "keep up, not catch up" approach, identifying misconceptions early and providing immediate intervention. Children who require support receive targeted scaffolding, manipulatives, and focused small-group sessions.

Rapid graspers are extended through sophisticated problems rather than accelerated content.

Assessment

Formative assessment informs in-the-moment teaching adjustments.

Termly assessments help identify learning gaps and shape planning.

The maths lead engages regularly with NCETM hub CPD materials to refine pedagogy and strengthen subject knowledge, this is then shared in regular staff meetings.

Please see our Assessment, Reporting and Recording Policy along with our Data Protocol for more information.

Transition from White Rose to NCETM

Brize Norton Primary School is currently transitioning from the White Rose scheme to a curriculum more firmly grounded in NCETM's mastery principles. This ensures consistency, coherence, and deeper conceptual understanding across year groups.

As part of our transition, we are adopting NCETM's prioritised progression, small-step sequencing, and recommended representations to deepen conceptual understanding, supported by NCETM classroom resources and PD materials.

This transition includes:

- Curriculum Redesign: Re-mapping units using NCETM small-step progression.
- Improved Consistency: Using NCETM-recommended representations to strengthen conceptual links.
- Fluency Focus: Strengthening early number knowledge and connections.
- Mixed-Age Planning: NCETM sequencing is particularly suited to mixed-age classes, supporting curriculum coherence.
- Staff Development: Teachers participating in NCETM CPD and subject knowledge development via Maths Hubs.

This shift aligns our curriculum with the latest national approaches to mastery and

strengthens teaching and learning across our school.

Impact

The impact of our curriculum is visible in confident, fluent, enthusiastic learners who enjoy mathematics and can apply it beyond the classroom.

We measure impact through:

- Deep understanding: Pupils show sustained conceptual knowledge rather than superficial recall.
- Fluency and accuracy: Children confidently and efficiently retrieve number facts, enabling success with complex tasks.
- Reasoning proficiency: Pupils can explain and justify their thinking using precise mathematical vocabulary.
- Positive attitudes towards maths, where children show curiosity and resilience in their maths learning.
- Strong progress and attainment: Assessment shows pupils making secure progress and achieving well relative to their starting points.
- Real-world application: Children apply their mathematical knowledge across the curriculum and everyday life, reflecting guidance that mathematics is essential to daily experiences.

Through this policy and approach, every child is supported to SHINE—striving, helping, inspiring, nurturing, and excelling as capable and confident mathematicians.