

The Meadows Primary School

Mathematics Curriculum Policy

Purpose of Study / Rationale

Mathematics is essential to everyday life and underpins science, technology, engineering and financial literacy. Our curriculum provides pupils with the knowledge, skills and understanding needed to reason mathematically, solve problems and make sense of the world around them.

We believe **every pupil can learn and enjoy mathematics**. Our curriculum develops **deep, secure conceptual understanding**, enabling pupils to become **confident, fluent and flexible mathematicians** who can apply their learning in a range of contexts. We promote curiosity and enjoyment of mathematical discovery, encouraging pupils to recognise patterns, make connections and appreciate the creativity and structure of the subject.

Through carefully sequenced learning and explicit development of positive mathematical learning behaviours, pupils are supported to think mathematically, talk mathematically and build the strong foundations needed for future study, employment and everyday life.

Intent

At The Meadows Primary School, we believe **every child is a mathematician**. Our curriculum is coherently sequenced, so pupils build secure knowledge and deep understanding year on year.

Mathematics is an essential life skill. Through a **Teaching for Mastery** approach, we develop learners who are **curious, confident and creative thinkers**. We want children to see mathematics as a connected, sense-making subject that they can explore, enjoy and succeed in.

We aim for every child to:

- **Secure strong fluency** in fundamental mathematical facts and skills.
- **Develop deep understanding**, not just recall procedures.
- **Use precise mathematical language** to clearly explain their thinking.
- **Reason mathematically** by spotting patterns, making connections and justifying ideas.
- **Persevere with challenge**, recognising that mistakes help them learn.
- **Solve problems confidently** in a range of contexts across the curriculum and in real life.
- Work independently and collaboratively, supporting one another to succeed.

These principles ensure all pupils move forward together, supported and challenged appropriately, so that they become secure, confident and capable mathematicians.

Implementation

At The Meadows Primary School, teaching is **carefully sequenced** and responsive, so that all pupils develop secure, deep and connected understanding. This enables pupils to progress together and preventing long-term gaps through timely intervention.

How we teach mathematics

Our approach is guided by the **NCETM Five Big Ideas**: coherence, representation and structure, mathematical thinking, fluency and variation (appendix 1). Lessons are planned in small steps,

building understanding through the use of manipulatives, images and symbols that expose underlying mathematical structure.

Curriculum, Sequencing and Planning

Our mathematics curriculum ensures that pupils secure the essential knowledge and understanding required for future academic and life success. Progression is structured and coherent from the early years onwards. The **Early Learning Goals (ELG)**, the **NCETM Curriculum Prioritisation**, the materials used by **Oak National Academy**, and the **DfE Ready to Progress criteria** together outline the key concepts that pupils must master from EYFS to Year 6.

These frameworks provide a clear, consistent sequence of learning, ensuring that pupils build strong foundations in the early stages and continue to develop their understanding in a logical and connected way. This supports high-quality teaching, sustained progression for all learners, and secure preparation for the next phase of mathematical learning.

The calculation policy outlines the key strategies that should be taught and used in each year group for the 4 operations.

Early Years Foundation Stage (EYFS)

In EYFS, strong foundations are built through the NCETM Mastering Number programme, which develops secure number relationships and early fluency. Teachers also deliver intentional input for spatial reasoning (shape, position, direction, pattern) aligned to the Early Learning Goals.

Mathematical learning is strengthened through carefully planned continuous provision, with adults modelling precise mathematical language and encouraging children to notice patterns, explore structure and explain their thinking.

KS1 & KS2

From 2025/26, The Meadows follows [Oak National Academy's primary mathematics curriculum](#) as the core planning sequence. Medium-term planning draws on Oak units, NCETM Curriculum Prioritisation and Ready-to-Progress guidance to ensure secure progression.

Oak's units are:

- developed with MEI (Maths in Education and Industry) and quality-checked in consultation with NCETM
- aligned with NCETM Curriculum Prioritisation (CP)
- mapped to the DfE Ready-to-Progress (RTP) criteria
- organised into coherent, small-step units that build progression and depth

Daily Lesson Structure

Teachers plan and deliver lessons that:

- follow a clear small-step progression
- use purposeful representations and manipulatives to reveal mathematical structure
- apply carefully crafted variation to highlight essential features of new learning
- promote reasoning, explanation and precise mathematical language through rich questions

- highlight connections within and across mathematical domains
- provide structured opportunities to practise, apply, generalise and embed learning

Adapting Oak Materials

Teachers adapt Oak materials to meet the needs of their class.

Keep (non-negotiable): sequence of learning, key representations, variation patterns, reasoning structures.

May adapt: scaffolds, delivery, challenge/depth tasks; decide if all steps and all practice tasks are required to meet the outcome (ensure coherence).

Adaptations should be **evidenced in planning** (slides hidden but not deleted).

Fluency

In addition to the main mathematics lesson, there is a daily **15–20 minute fluency session** to rehearse key concepts and practise essential number facts to strengthen automaticity. Content is selected from recent learning and spaced retrieval of prior units, using assessment to target gaps.

- **Y1–5:** Mastering Number (NumBots / TTRS for additional retrieval practice)
- **Y6:** Fluency targeted to KS2 assessment needs

Inclusion and SEND

All pupils access the same key learning, with support through **in-lesson scaffolds, pre-teaching, same-day intervention**, and **targeted small-group support**. Some pupils will also work on **specific mathematical targets** (1:1 or small-group), aligned to the SEND policy. Challenge comes from deepening understanding, not accelerating content.

Marking

Marking and feedback align with our mastery approach and focus on actionable next steps within or immediately after the lesson

Purpose

All marking and feedback should help pupils:

- understand their next steps
- correct or improve their work
- make progress within the lesson or through same-day intervention

Pupil Self-Marking

Pupils may mark their own work in green pen during the lesson. This gives immediate feedback, supports independence and helps teachers identify who needs further support.

Teacher Feedback

Verbal feedback is prioritised. Written marking should be minimal but meaningful.

Marking should:

- show where an error occurred
- provide a prompt, model or question to move learning forward
- address misconceptions or extend thinking—not just tick or cross

Cross-Curricular Links

Teachers make purposeful links between mathematics and other curriculum areas such as science, geography and design technology, ensuring pupils apply mathematics in meaningful contexts.

Classroom Environment

All classrooms include a mathematics working wall displaying key representations and models, vocabulary and stem sentences that support conceptual understanding for current unit content.

Assessment

Assessment is integral to effective teaching. Assessment is used effectively to ensure that all pupils make strong and sustained progress in mathematics. Teachers use frequent, low-stakes assessment—such as recall tasks, fluency checks and cold/warm tasks—to identify what pupils have learned and what they need next. Regular assessment checkpoints enable misconceptions to be addressed promptly so that learning is secure and gaps are quickly closed.

Formative Assessment

Teachers use ongoing assessment (including questioning, observation, retrieval tasks and discussion) to:

- identify misconceptions
- adjust teaching within and between lessons
- tailor scaffolds, examples and interventions

Cold (blue) tasks at the start of a unit assess pupils' readiness for new learning, while warm (pink) tasks at the end assess what has been learned.

Summative Assessment

- EYFS assessment is based on continuous observation against the Early Learning Goals.
- **NTS Assessments termly in Years 1–5 and previous KS2 SAT papers in year 6** to track attainment and progress.
- **Fact fluency checks:**
 - **KS1 and Year 3:** half termly NumBots (challenges) used to assess **core addition facts:**
 - Year 1: 0, 1, & 2; within 10; doubles
 - Year 2 & 3: 0, 1, & 2; within 10; doubles; near doubles; across 10; 10; 8 & 9; within 20
 - **KS2:** half termly Times Table Rock Stars (Gig and Soundcheck) used to assess **multiplication fact fluency**

Results inform planning, intervention and whole-school analysis.

Statutory Assessments

- EYFS Profile
- Year 4 Multiplication Tables Check
- Year 6 SATs

Impact

Our mastery curriculum enables pupils to **think and talk mathematically with confidence**, supported by classrooms where **representations, structure and precise language** secure deep understanding. Pupils approach challenge with **resilience and a positive attitude**, seeing mathematics as meaningful and relevant.

As a result, pupils demonstrate:

- fluency, confidence and deep understanding
- confident reasoning and accurate mathematical vocabulary
- successful problem solving in varied contexts
- positive attitudes, perseverance and enjoyment of mathematics
- secure readiness for the next stage of learning and future study

Roles and Responsibilities

The Maths Subject Leader (with support of SLT) is responsible for:

- monitoring teaching, learning and progress;
- supporting staff with CPD and evidence informed subject developments;
- leading curriculum development and reviewing policy.
- Supporting teachers to deliver high-quality mathematics teaching in line with this policy.

Governors monitor provision and hold leaders to account.

Monitoring and Evaluation

Monitoring activities include:

- lesson visits and learning walks;
- book looks and planning reviews;
- analysis of assessments;
- pupil and staff voice.

Feedback will be shared promptly with agreed actions and revisited in subsequent monitoring. Findings inform CPD, improvement planning and future curriculum refinements.

Resources

Teachers have access to:

- manipulatives and representational materials;
- Oak National Academy resources;
- NCETM Professional Development (PD) materials;
- NCETM Curriculum Prioritisation (CP) materials;
- DfE and NCETM Ready to Progress materials;
- NTS assessments.
- Subscriptions for NumBots and Times Table Rock Stars stats features- to track key fact recall

Resources are organised for accessibility and consistent use across school.

Homework

Pupils are encouraged to complete **short, frequent** home practice (3–5 sessions per week) to build automaticity. To support this, we use **NumBots** and **Times Table Rock Stars**, which are simple for parents to access and support. These short activities help children build rapid recall of **addition, subtraction and multiplication facts**.

Research shows that **frequent, brief practice** develops automatic recall, reduces cognitive load, and enables pupils to approach more complex mathematical concepts with greater confidence.

Parents are encouraged to support their child in completing these quick, daily sessions to strengthen fluency and secure strong foundations in mathematics.

Appendix

Appendix 1

Coherence

1. Small steps are easier to take.
2. Focussing on one key point each lesson allows for deep and sustainable learning.
3. Certain images, techniques and concepts are important pre-cursors to later ideas. Getting the sequencing of these right is an important skill in planning and teaching for mastery.
4. When something has been deeply understood and mastered, it can and should be used in the next steps of learning.

Representation and structure

1. The representation needs to pull out the concept being taught, and in particular the key difficulty point. It exposes the structure.
2. In the end, the children need to be able to do the maths without the representation
3. A stem sentence describes the representation and helps the children move to working in the abstract (“ten tenths is equivalent to one whole”) and could be seen as a representation in itself
4. There will be some key representations which the children will meet time and again
5. Pattern and structure are related but different: Children may have seen a pattern without understanding the structure which causes that pattern

Variation

1. The central idea of teaching with variation is to highlight the essential features of a concept or idea through varying the non-essential features.

2. When giving examples of a mathematical concept, it is useful to add variation to emphasise:
 - a. What it is (as varied as possible);
 - b. What it is not.
3. When constructing a set of activities / questions it is important to consider what connects the examples; what mathematical structures are being highlighted?
4. Variation is not the same as variety – careful attention needs to be paid to what aspects are being varied (and what is not being varied) and for what purpose.

Fluency

1. Fluency demands more of learners than memorisation of a single procedure or collection of facts. It encompasses a mixture of efficiency, accuracy and flexibility.
2. Quick and efficient recall of facts and procedures is important in order for learners' to keep track of sub problems, think strategically and solve problems.
3. Fluency also demands the flexibility to move between different contexts and representations of mathematics, to recognise relationships and make connections and to make appropriate choices from a whole toolkit of methods, strategies and approaches.

Mathematical thinking

1. Mathematical thinking is central to deep and sustainable learning of mathematics.
2. Taught ideas that are understood deeply are not just 'received' passively but worked on by the learner. They need to be thought about, reasoned with and discussed.
3. Mathematical thinking involves:
 - looking for pattern in order to discern structure;
 - looking for relationships and connecting ideas;
 - reasoning logically, explaining, conjecturing and proving.

The Meadows Primary – Maths Policy: Staff Summary (2026)

Our Vision

Every child can be a mathematician.

We teach for mastery, enabling pupils to build deep, secure understanding and become confident, fluent, flexible mathematical thinkers.

Core Principles (Five Big Ideas)

We teach using the **NCETM Five Big Ideas**:

1. Coherence – small steps that build secure understanding
2. Representation & Structure – manipulatives and images reveal the maths
3. Mathematical Thinking – reasoning, conjecturing, explaining
4. Fluency – efficient, accurate recall
5. Variation – examples highlight essential features

These underpin all lessons and planning.

Teaching Approach

All pupils work on the same key learning.

We support through: scaffolds, pre-teaching, same-day intervention, targeted small-group support.
Challenge = depth, not acceleration.

Lessons should:

- clear small-step progression
- use representations purposefully
- highlight patterns and connections through structured variation
- develop rich reasoning with precise mathematical language
- include practice, application & generalisation

Curriculum & Planning

We follow Oak National Academy as our core sequence, aligned to: NCETM Curriculum Prioritisation and we use the DfE Ready-to-Progress criteria to support closing of gaps.

Adapting Oak materials: **keep**: sequence, key representations and variation;

Adapt: scaffolds/challenges as needed. Adaptation clear: slides hidden but not deleted.

EYFS: Mastering Number + spatial reasoning through intentional teaching and high-quality continuous provision.

Daily fluency (15–20 mins): Revisit & rehearse key facts

KS1/2: **Mastering Number**, NumBots, Times Table Rock Stars

Y6: focus on fluency for KS2 assessment requirements

Assessment

Formative: questioning, observation, retrieval tasks, discussion,

Cold (blue) tasks at the start of a unit assess pupils' readiness for new learning, while warm (pink) tasks at the end assess what has been learned.

Summative:

EYFS: ELGs

Years 1–5: NTS tests (termly)

Year 6: previous SATs papers (termly)

KS1 & Y3: addition fact check (NumBots: Challenges (half-termly))

KS2: Multiplication facts check (TTRS: Gig & Soundcheck (half-termly))

Statutory: Y4 MTC, Y6 SATs

Assessment supports planning, intervention and identifying gaps.

Marking

Verbal feedback prioritised. Pupils may self-mark in green pen.

Written marking can be minimal but should be meaningful, and must:

- show where the error is
- give a prompt/model/question
- address misconceptions or deepen thinking

Environment

Every classroom should have a **maths working wall** which includes: key representations/models, vocabulary, stem sentences, current unit content

Homework

Regular practice using: KS1 NumBots (addition/subtraction facts) and KS2 TTRS (times tables recall)

Short, frequent practice builds automaticity.

Roles

Teachers: deliver mastery teaching, use small steps, teach with representations, assess continuously.

Maths Lead: monitoring, CPD, curriculum development.

Support Staff: use agreed representations, prompts, language, and scaffolds in line with lessons.