Comberton Primary School

A caring community for all to shine

Maths Policy

Signed by:

Deena Frost Headteacher Date: Sep 2025

Sue Wombell Chair of Raising Standards Committee Date: Nov 2025

Last updated: 26 September 2025

Contents:

Statement of intent

At Comberton Primary School, maths is viewed as a fundamental and integral part of the school curriculum and is taught both as a discrete subject and across the wider curriculum. A high-quality maths education provides a firm foundation for understanding how maths is used in everyday life and activities, developing pupils' ability to reason mathematically and solve problems. It also encourages a logical and methodical mindset and gives confidence that through hard work and practice, success is possible.

Through the teaching of maths, we aim to develop:

- A positive attitude towards maths and an awareness of the relevance of maths in the real world.
- **Fluency** in the fundamentals of mathematics, through varied and frequent practice, so that pupils develop their ability to recall and apply knowledge rapidly and accurately.
- An ability to **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- An ability to **solve problems** and think logically in order to work systematically and accurately.
- An ability to work both independently and in cooperation with others.
- An appreciation of the creative aspects of maths.

1. Legal Framework

This policy has due regard to statutory guidance including, but not limited to, the following:

- DfE (2021) 'National curriculum in England: Mathematics programmes of study'
- DfE (2025) 'Statutory framework for the early years foundation stage'
- DfE (2021) 'Teaching mathematics in primary schools'

This policy operates in conjunction with the following school policies:

- Equalities Policy
- Equalities Objectives and Accessibility Plan
- Assessment Policy
- Feedback to Learning Policy

2. Roles and responsibilities

The subject leader is responsible for:

- Preparing policy documents and curriculum plans for the subject.
- Reviewing changes to the national curriculum and advising on their implementation.
- Monitoring the learning and teaching of maths, providing support for staff where necessary.
- Ensuring the continuity and progression from year group to year group.
- Encouraging staff to provide effective learning opportunities for pupils.
- Helping to develop colleagues' expertise in the subject.
- Organising the deployment of resources and carrying out a regular audit of all maths-related resources.
- Liaising with teachers across all phases.
- Communicating developments in the subject to all teaching staff.
- Leading staff meetings and providing staff members with the appropriate training.
- Organising, providing and monitoring CPD opportunities in the subject.
- Ensuring common standards are met for recording and assessing pupil performance.
- Advising on the contribution of maths to other curriculum areas, including cross-curricular and extra-curricular activities.
- Collating assessment data and setting new priorities for the development of maths in subsequent years.

The classroom teacher is responsible for:

- Acting in accordance with this policy.
- Ensuring progression of pupils' mathematical skills, with due regard to the national curriculum.
- Planning lessons effectively, ensuring a range of teaching methods are used to cover the content of the national curriculum.
- Liaising with the subject leader about key topics, resources and support for individual pupils.

- Monitoring the progress of pupils in their class and reporting this on an annual basis to parents.
- Reporting any concerns regarding the teaching of the subject to the subject leader or a member of the SLT.
- Undertaking any training that is necessary in order to effectively teach the subject.

The SENCO is responsible for:

- Liaising with the subject leader in order to implement and develop maths throughout the school.
- Organising and providing training for staff regarding the maths curriculum for pupils with SEND.
- Advising staff how best to support pupils' needs.
- Advising staff on the inclusion of mathematical objectives in pupils' individual education plans.
- Advising staff on the use of teaching assistants in order to meet pupils' needs.

3. Curriculum Design

3.1 Teaching for Mastery

Since September 2023, Comberton Primary School has been working with the GLOW Maths Hub in developing a mastery approach (based on the NCETM's 5 Big Ideas) to the teaching and learning of mathematics. These Teaching for Mastery principles underpin our curriculum:

- It is achievable for all
  We believe that all children are capable of learning and using maths, given sufficient time, good teaching and sustained effort and focus.

- The whole class moves through content at broadly the same pace
  Each topic is studied in depth and the teacher does not move on to the next stage until all children demonstrate they have a secure understanding of the mathematical concepts involved.

- Building conceptual and procedural fluency
  Contexts and representations (concrete, pictorial and abstract) are carefully chosen to develop reasoning skills and to help pupils' link concrete ideas to abstract mathematical concepts. There are high expectations for pupils to learn times tables, key number facts (including through the use of KIRFs – Key Instant Recall Facts) and develop a true sense of number. When applying their knowledge, pupils are encouraged to think whether their method is accurate and efficient.

- Challenge through greater depth rather than acceleration
  Though the whole class goes through the same content at the same pace, there is still plenty of opportunity for challenge. Pupils who grasp concepts quickly are challenged with rich and

sophisticated problems within the topic. Those children who are not sufficiently fluent are provided with additional support to consolidate their learning before moving on.

3.2 Coherence

At Comberton, we use White Rose Maths Schemes of Learning as a framework for our curriculum, supplemented with guidance from the NCETM spines, although this is not rigidly applied. This ensures our curriculum is well-sequenced and coherent.

4. Planning

We have a consistent approach to planning, which is undertaken at three levels:

- Long Term Planning
  Long-term planning is used to outline the units to be taught within each year group. This is based on information contained in the programmes of study in the National Curriculum for Mathematics, for KS1 and KS2, and the Statutory Framework for the Early Years Foundation Stage for pupils in Nursery and Reception. We follow guidance from White Rose Maths on the order of units of work to ensure that concepts are taught in a logical order, drawing upon essential prerequisite knowledge. In Years 1 and 2, a mixed-age curriculum is implemented based on White Rose Maths to ensure mathematical knowledge is cohesive and progressive for all children. In consultation with the Maths Leader, teachers may split particularly long units and teach the second part later in the term or in the following term.

- Medium Term Planning
  Medium term planning sets out the main teaching objectives taught in each unit of work. It is informed by the White Rose Small Steps documents, alongside the NCETM spine materials and the DfE/NCETM Ready to Progress documentation. Teachers are encouraged to use their professional judgement, based on results from formative assessments, when deciding on how long is needed to secure understanding in a unit, whilst ensuring all objectives are taught in sufficient detail by the end of the academic year.

- Short Term Planning
  Short-term planning will be used flexibly to reflect the objectives of the lesson, with all lessons being carefully sequenced and progressive. Contexts and representations are carefully chosen to help pupils link concrete ideas to abstract mathematical concepts. In addition, relationships between numbers are exposed through careful choice of calculation and order of questions. Opportunities to reason mathematically are evident in every lesson and the majority of lessons also provide the opportunity to solve problems. Collaborative planning between year group colleagues is encouraged to ensure consistency.

5. Lesson structure

5.1 The Early Years Foundation Stage

- In the Foundation Stage, pupils are given the opportunity to develop their understanding of number, measurement and shape and space through a combination of short, formal teaching sessions as well as a range of planned structured play situations, where there is plenty of scope for exploration. All activities will adhere to the objectives set out in the DfE's 'Statutory framework for the early year's foundation stage'.
- Continuous provision provides a range of engaging activities to develop mathematical skills and provides opportunities for pupils to experiment with mathematics themselves through recording and using a range of equipment. Mathematical learning is interwoven throughout the school day and all learning opportunities are maximized. Materials to support mathematical development are available to the children at all times.
- Differentiated support is provided through adult-led activities to target pupils at their stage of development. Staff questioning enables children to consolidate learning yet incorporate new skills into challenges at an appropriate level. Additional support provides children with time to embed skills and address misconceptions.
- Children's learning is recorded weekly in their 'Math's Learning Journey' so staff can monitor progress and attainment.

5.2 Year 1 and 2

- All children are exposed to the same content and maths resources across the straight year 2 and year 1/2 class.

5.3 Key Stage One and Two

- Maths lessons should last between 45 and 60 minutes. In addition, all classes in all classes in KS1 deliver short, daily fluency-focused sessions.
- Lessons are sharply focused with one new objective introduced at a time, based on the DfE's statutory guidance 'National curriculum in England: mathematics programmes of study'. Children in the mixed age Year 1 and 2 class and the Year 2 class are exposed to the same mathematical resources and content to ensure consistency and progression.
- Difficult points and potential misconceptions are identified in advance and strategies to address them planned. Key questions are planned to challenge thinking and develop learning for all pupils.
- Teaching sequences involve review of prior learning through retrieval tasks, teacher input and teacher-led discussion interspersed with short tasks involving pupil-to-pupil discussion. This is followed by independent work involving fluency practice, reasoning and problem solving.
- The use of high-quality materials and tasks to support learning and to provide access to the mathematics is integrated into lessons.

- Contexts and representations are carefully chosen to develop reasoning skills and to help link concrete ideas to abstract mathematical concepts.
- Lessons are structured with formative assessment opportunities throughout. This allows teachers and teaching assistants to evaluate what has been learnt, review success and address misconceptions. It also provides the opportunity for peer/self-assessment.
- Gaps in pupils' knowledge and understanding are identified early through in-class through questioning. They are addressed rapidly through individual or small group support in the lesson, or intervention separate from the maths lesson, preferably on the same day, to ensure all pupils are ready for the next lesson.
- Learning in books is presented and marked in accordance with guidance in the Feedback to Learning policy.

6. Assessment and reporting

Maths is assessed both formally and informally throughout the year, using a mixture of summative and formative assessment techniques.

6.1 Formative and summative assessment

- In Year 2 and KS2, prior to starting a new unit of work, pupils complete a short diagnostic, formative assessment to gauge their readiness to learn new concepts within the unit. As a result of this, additional whole-class practice of prerequisite knowledge may be organised or specific pupils identified for small group or 1:1 intervention, if assessments demonstrate that foundational knowledge is not secure.
- On a day-to-day basis, formative assessment strategies including questioning, pupil discussions, quizzes and marking of work, enable the teacher to monitor pupil understanding of mathematical concepts and ensure misconceptions are addressed immediately, preventing any new gaps in knowledge to form. Ideally, this targeted support will happen in the maths lessons; however, sometimes a short intervention session is needed. This ensures that these pupils keep up with the rest of the class.
- End of unit summative assessments are used in KS1 and KS2, the results of which help inform planning, teaching, interventions and guided support of pupils.
- The progress and development of pupils within the EYFS is assessed against the early learning goals outlined in the 'Statutory framework for the Early Years Foundation Stage'.
- Attainment data and progress information is collected at the end of Autumn and Spring term and forms the starting point for termly pupil progress discussions with Phase Leaders.

6.2 Statutory testing

- In the first six weeks of the Autumn term, pupils in Reception take part in a statutory, 1:1 baseline assessment, in which the following areas of maths are assessed:
  - Early number
  - Early calculation (early addition and subtraction)
  - Mathematical language
  - Early understanding of pattern
- Year 4 pupils complete the Multiplication Tables Check in June
- Year 6 pupils sit end of KS2 tests in May.

6.3 Reporting to parents

Parents are provided with a written report about their child's maths attainment and progress, during the summer term. These will include information on the pupil's attitude towards maths, understanding of mathematical terminology, investigatory skills and the knowledge levels they have achieved. Verbal reports are also provided at parent-teacher evenings during the Autumn and Spring terms.

7. Cross-curriculuar links

Wherever possible, the maths curriculum will provide opportunities to establish links with other curriculum areas.

- **English**
  Mathematical terminology is used, where appropriate. Maths-based texts are sometimes used in English lessons and in guided reading sessions.
- **Science**
  Pupils' data collection and analysis skills are further developed through the conduction of physical experiments, using units of measurement, calculating averages and interpreting results. Pupils record their finding using charts, tables and graphs.
- **Humanities**
  Data analysis, pattern seeking and problem-solving skills are developed through the teaching of geography. Pupils' understanding of time and measurements of time are developed through discussions of historical events.
- **Computing**
  Pupils are encouraged to use calculators and other electronical devices, gaining confidence throughout their school experience. Computing will be used to enhance pupils' maths skills through the use of online resources and the creation of spreadsheets. Computing will also be used to record findings, using text, data and tables.

8. Resources

The subject leader will undertake an audit of maths equipment and resources on a regular basis. Maths resources are stored in classrooms and are easily accessible to pupils during lessons. Maths working walls are utilised and updated regularly, in accordance with the area of maths being taught at the time.

9. Equal opportunities

In accordance with our Equalities Policy, all pupils will have equal access to the maths curriculum. Gender, learning ability, physical ability, ethnicity, linguistic ability and/or cultural circumstances will not impede pupils from accessing all maths lessons. Where it is inappropriate for a pupil to participate in a lesson because of reasons related to any of the factors outlined above, the lessons

will be adapted to meet the pupil's needs and alternative arrangements involving extra support will be provided where necessary. All efforts will be made to ensure that cultural and gender differences will be positively reflected in all lessons and teaching materials used.

We aim to provide academically more able pupils with the opportunity to extend their mathematic thinking through activities such as investigative work and research of a mathematic nature.

10. Monitoring and review

- The maths subject leader will monitor teaching and learning in the subject by carrying out the following activities throughout the year:
    - ❖ Monitoring of class teachers' medium term plans for maths
    - ❖ Monitoring of teaching and learning taking the form of lesson observations, learning walks, book monitoring and pupil interviews
    - ❖ Monitoring of assessment data, including termly assessment information and statutory assessments
    - ❖ SENCO and maths leader to monitor progress of children on the SEND Register and agree support/interventions
    - ❖ Monitoring delivery and impact of interventions
- Training needs are identified as a result of whole school monitoring and evaluation, performance management and needs of children. These will be reflected in the Mathematics Action plan and School Development Plan.
- This policy will be reviewed on a biennial basis by the subject leader. A member of the governing body meets regularly with the subject leader to evaluate standards and progress.
- Any changes made to this policy will be communicated to all teaching staff.