



CRADLEY CE PRIMARY SCHOOL

Mathematics: Intent, Implementation, Impact

At Cradley, we believe that every child can achieve in mathematics. We recognise that the ability to reason mathematically is the single most important factor in ensuring pupils' success in maths. Therefore, opportunities to develop reasoning skills are embedded throughout all mathematics lessons. These skills support deep conceptual understanding, enabling pupils to make connections, improve fluency, solve problems and ultimately become confident, life-long mathematicians.

Intent

Our mathematics curriculum is designed to:

- Develop secure foundational knowledge that supports mathematical understanding, reasoning and problem solving.
- Ensure pupils develop fluency, reasoning and problem-solving skills through carefully sequenced, progressive learning.
- Build upon pupils' prior learning, both within year groups and across the school.
- Be underpinned by National Curriculum progression documents, including objectives, key facts and problem-solving expectations.
- Follow a concrete–pictorial–abstract (CPA) approach to support deep understanding.
- Develop pupils' resilience, perseverance and confidence in mathematics.
- Enable all pupils to aspire to and achieve the National Curriculum expectations for their year group.
- Foster positive attitudes towards mathematics, ensuring pupils are engaged, motivated and able to achieve their full potential.

Implementation

To achieve our intent, mathematics teaching at C is characterised by the following:

- Mathematics is taught daily and in line with the National Curriculum objectives for each year group.
- White Rose Maths is used as the core planning tool, enriched with:
 - explicit opportunities for reasoning
 - open-ended and problem-solving tasks embedded within lessons.
- Sentence stems are used to support the accurate use of mathematical vocabulary and to develop reasoning.
- All pupils learn through the CPA approach, using concrete resources, pictorial representations and abstract methods.
- Targeted questioning is used to assess understanding and challenge pupils' mathematical thinking.
- A range of Assessment for Learning (AfL) strategies are used to identify misconceptions and inform next steps.
- Mistakes are celebrated as learning opportunities, promoting a growth mindset.
- Pupils are encouraged to self- and peer-assess during lessons and to move on to greater challenge with teacher support.
- Mastering Number in Early Years and Key Stage 1 provides daily, focused teaching of number, allowing pupils time to embed key concepts into long-term memory.



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Impact

As a result of our mathematics curriculum:

- Most pupils achieve age-related expectations by the end of each academic year.
- Pupils demonstrate a positive, 'can-do' attitude towards mathematics.
- Pupils can reason mathematically, explain their thinking and solve problems confidently.
- Mathematical concepts are securely embedded in long-term memory.
- Pupils use the CPA approach independently to support their learning.
- Pupils show resilience and perseverance when tackling mathematical challenges.
- Teachers feel confident and supported to deliver high-quality mathematics lessons that ensure progression.
- Pupils are well prepared for the next stage of their mathematical learning.

Assessment

Formative Assessment

- Verbal feedback is central to mathematics teaching, allowing misconceptions to be identified and addressed immediately.
- Diagnostic assessments at the end of units inform future planning and support pupil progress.

Summative Assessment

- Years 2–6 use White Rose termly assessments to support teacher assessment.
- Year 1 use White Rose end-of-unit assessments.

Monitoring and Evaluation

Impact is measured through the triangulation of:

- lesson observations
- work scrutiny
- pupil voice

This is supported by subject leader and staff discussions, where strengths and areas for development are identified. Outcomes inform annual action planning and ongoing evaluation of impact.