

RAVENSOTE JUNIOR SCHOOL

MATHEMATICS POLICY

2026 - 2027



Date of Approval		Date of Review	
July 2026		July 2027	
Signed	Mrs A Wells Headteacher	Signed	Emily Gibson Chair of Governors



Introduction

This policy sets out the principles, statutory requirements, and best practices for the teaching and learning of Mathematics at Ravenscote Junior School. It is designed to ensure high-quality, inclusive, and ambitious Maths provision in line with the 2014 National Curriculum for England and the expectations of the national inspectorate. The policy outlines our approach to curriculum intent, implementation, and impact, ensuring all pupils develop mathematical fluency, reasoning, and problem-solving skills to prepare them for future learning and life.

Aims

- To present Mathematics as a challenging, creative, and relevant subject, fostering a positive and confident attitude in all pupils.
- To ensure all pupils become fluent in the fundamentals of Mathematics, develop conceptual understanding, and recall and apply knowledge rapidly and accurately.
- To enable pupils to reason mathematically, explain their thinking using precise vocabulary, and solve a variety of routine and non-routine problems.
- To provide opportunities for pupils to apply mathematical skills in real-life contexts and across the curriculum.
- To promote resilience, engagement, and pride in mathematical work.
- To support the spiritual, moral, social, and cultural development of pupils through Mathematics.

Statutory Requirements

- Deliver the statutory Mathematics curriculum as set out in the National Curriculum for England (2014), covering Number, Measurement, Geometry, Statistics, Ratio and Proportion, and Algebra (where appropriate).
- Ensure equal access to Mathematics for all pupils, making reasonable adjustments for those with SEND, in accordance with the Equality Act 2010 and SEND Code of Practice (2015).
- Comply with the Health and Safety at Work Act 1974 in the use of mathematical equipment and resources.
- Adhere to safeguarding requirements as outlined in Keeping Children Safe in Education (2023).
- Administer and report statutory end of Key Stage 2 assessments in Mathematics as required by the Assessment and Reporting Arrangements (ARA).
- Uphold the Teachers' Standards (2012) in subject knowledge, planning, teaching, and assessment.

Curriculum Coverage

The Mathematics curriculum at Ravenscote Junior School provides comprehensive coverage of the following broad areas:



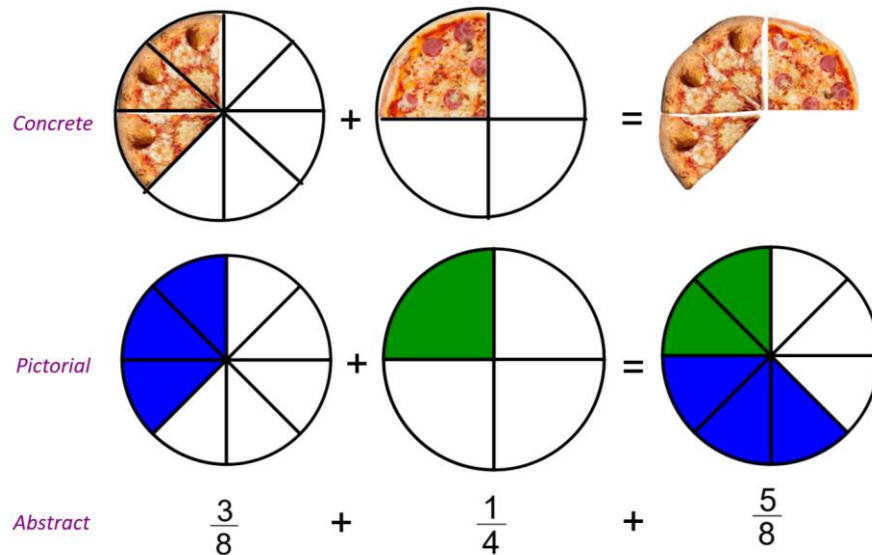
- **Number:** Place value, addition, subtraction, multiplication, division, fractions, decimals, and percentages.
- **Measurement:** Length, mass, volume, time, money, and related calculations.
- **Geometry:** Properties of shapes, position, direction, and movement.
- **Statistics:** Data collection, representation, and interpretation using charts, graphs, and tables.
- **Ratio and Proportion:** (Upper Key Stage 2) Understanding and solving problems involving proportional relationships.
- **Algebra:** (Upper Key Stage 2) Introduction to simple algebraic concepts and notation.

The curriculum is sequenced to ensure progression in knowledge, skills, and understanding, with regular opportunities for pupils to revisit and deepen prior learning.

Curriculum Implementation

- **Planning:** Teachers follow a coherently sequenced scheme of work based on the National Curriculum, structured into blocks to ensure progression and mastery. Medium-term plans are designed to make links between concepts and support cumulative knowledge.
- **Teaching Approaches:**
 - Daily Mathematics lessons using a mastery approach, where all pupils access the same content with appropriate support and challenge.
 - Use of the Concrete-Pictorial-Abstract (CPA) approach to develop deep conceptual understanding.
 - Emphasis on fluency, reasoning, and problem-solving in every lesson.
 - Regular opportunities for mathematical talk, discussion, and use of precise vocabulary.
 - Responsive teaching, including the use of questioning, feedback, and mini-plenaries to address misconceptions.
 - Additional multiplication tables lessons in lower Key Stage 2 to secure recall by the end of Year 4.
- **Resources:**
 - High-quality manipulatives, visual aids, and digital tools are used purposefully to support learning.
 - Safe and appropriate use of all resources, with risk assessments for practical activities.
- **Lesson Structure:**
 - Warm-up or retrieval activity (e.g., Flashback 4) to reinforce prior learning.
 - Introduction of new concepts with teacher modelling and exploration.
 - Fluency practice, independent or paired work, and problem-solving tasks.
 - Discussion of answers, addressing misconceptions, and opportunities for reasoning.
 - Plenary or mini-plenaries to consolidate and extend understanding.





Concrete step of CPA

Concrete is the “physical” stage. During this stage, students use the object within the problem to model it. Unlike traditional mathematics teaching methods where teachers demonstrate how to solve a problem, the CPA approach brings concepts to life by allowing children to experience and handle physical (concrete) objects. With the CPA framework, every abstract concept is first introduced using physical, interactive concrete materials. For example, if a problem involves pieces of fruit being shared between people, children can first handle actual fruit and share it out. From there, they can progress to handling abstract counters or cubes which represent the fruit.

Pictorial step of CPA

Pictorial is the “seeing” stage. Here, visual representations of concrete objects are used to model problems. This stage encourages children to make a mental connection between the physical object they just handled and the abstract pictures, diagrams or models that represent the objects from the problem.

Building or drawing a model makes it easier for children to grasp difficult abstract concepts (for example, fractions). Simply put, it helps students visualise abstract problems and make them more accessible.

Abstract step of CPA

Abstract is the “symbolic” stage, where children use abstract symbols to model problems. Students will not be able to use this stage until they have a solid understanding of the concrete and pictorial stages of the problem. The abstract stage involves the teacher introducing abstract concepts (for example, mathematical symbols). Children are introduced to the concept at a symbolic level, using only numbers, notation, and mathematical symbols (for example, +, −, x, ÷ to indicate addition, subtraction, multiplication or division).



Assessment

- **Formative Assessment:**
 - Ongoing assessment for learning (AfL) strategies, including questioning, observation, feedback, and pupil self-reflection.
 - Immediate verbal feedback and adaptation of teaching to address misconceptions.
 - Use of assessment tasks at the end of each unit to check understanding and inform future planning.
- **Summative Assessment:**
 - Termly assessments using standardised tests and teacher judgements to track progress against age-related expectations.
 - End of Key Stage 2 statutory assessments (SATs) in arithmetic and reasoning.
 - Baseline assessments for new pupils and regular review of attainment and progress.
- **Recording and Reporting:**
 - Teachers record attainment and progress, identifying pupils who are emerging, developing, secure, or exceeding in relation to objectives.
 - Information is shared with parents through reports and meetings, and with the next teacher to support continuity.
- **Use of Assessment:**
 - Assessment outcomes inform planning, interventions, and support for pupils at risk of falling behind, as well as challenge for higher attainers.

Roles and Responsibilities

Role	Key Responsibilities
Headteacher	Overall responsibility for Maths provision, compliance, and standards.
Mathematics Subject Leader	Lead curriculum development, monitor teaching and outcomes, support staff, deliver CPD, analyse data.
Class Teachers	Plan and deliver high-quality Maths lessons, assess and record progress, adapt teaching as needed.
Learning Support Assistants	Support targeted groups and individuals, deliver interventions, assist with resources.
Pupils	Engage actively in lessons, use mathematical vocabulary, reflect on learning, and seek support.
Parents/Carers	Support Maths learning at home, engage with school communications and policies.

Inclusion

- All pupils, regardless of background, gender, ethnicity, or ability, have equal access to high-quality Maths education.
- Teaching is adapted to meet the needs of pupils with SEND, EAL, or other additional needs, including the use of personalised programmes and targeted interventions.



- The CPA approach and use of manipulatives support diverse learning styles and needs.
- Pupils who grasp concepts quickly are provided with rich and sophisticated challenges within the topic, while those needing more support receive additional teaching or interventions (e.g., call-back sessions).
- Reasonable adjustments are made in line with statutory guidance to remove barriers to learning.

Professional Development

- Regular staff meetings and training sessions focus on Maths subject knowledge, pedagogy, and curriculum developments.
- The Mathematics Subject Leader provides coaching, demonstration lessons, and support with planning and assessment.
- Opportunities for staff to engage with external CPD, networks, and current research.
- Ongoing development in the effective use of manipulatives, reasoning, problem-solving, and assessment for learning.

Inspectorate Expectations

This policy ensures compliance with the national inspectorate's expectations by:

- Providing an ambitious, coherently planned, and sequenced Maths curriculum for all pupils.
- Ensuring high-quality teaching that develops fluency, reasoning, and problem-solving.
- Using assessment effectively to inform teaching and address gaps in learning.
- Promoting positive attitudes, engagement, and resilience in Mathematics.
- Supporting SMSC development and preparation for life in modern Britain.
- Ensuring strong subject leadership, monitoring, and continuous improvement.
- Demonstrating evidence of progression, mastery, and high standards in pupils' mathematical understanding and outcomes.

Monitoring and Review

- The Mathematics Subject Leader and Senior Leadership Team monitor the implementation and impact of this policy through:
 - Review of planning and lesson observations.
 - Scrutiny of pupils' work and assessment data.
 - Pupil and staff discussions.
 - Analysis of statutory and internal assessment outcomes.
- The policy is reviewed annually, or sooner if required by changes in statutory guidance or school priorities.
- Feedback from staff, pupils, and parents informs ongoing development and improvement.



Links to Other Policies

- Teaching and Learning Policy
- Calculation Policy
- Assessment Policy
- SEND Policy
- Equality Policy
- Safeguarding and Child Protection Policy
- Homework Policy
- Health and Safety Policy

