

Inclusive Maths Curriculum Overview

At HOPECFI, our curriculum is designed to meet the needs of children with Special Educational Needs and Disabilities (SEND) and those with behavioural challenges. It incorporates sensory, practical, and accessible approaches to support diverse learning styles, foster engagement, and build confidence in mathematics.

Contents

- 1. Reception
- 2. Year One
- 3. Year Two
- 4. Year Three
- 5. Year Four
- 6. Year Five
- 7. Year Six
- 8. Year Seven
- 9. Year Eight
- 10. Year Nine
- 11. Year Ten
- 12. Year Eleven
- 13. Key Adaptations for SEND and Behavioural Challenges



1

1. Reception

• Autumn Term

Focus: Building early mathematical understanding, developing number sense, and exploring basic shapes and patterns. Activities are designed to include hands-on, sensory experiences such as matching and sorting objects with textures, colours, or sounds. Small-group work fosters relationships and ensures all children feel supported. Visual aids and physical manipulatives are used to introduce basic counting and comparisons, such as "more" and "less," to ensure concepts are accessible for all learners.

• Spring Term

Focus: Introducing number fluency, measurement concepts, and spatial awareness. Lessons use real-life contexts, such as comparing items in role-play shops, to make learning meaningful. Sequencing daily routines helps children with behaviour challenges build predictability and structure. For spatial awareness, activities include building with blocks and exploring 3-D shapes with tactile resources to enhance engagement.

• Summer Term

Focus: Extending number knowledge and problem-solving. Activities such as shared play involving grouping and sharing build foundational multiplication and division skills. Using 2-D and 3-D shapes in creative tasks, such as pattern-making or simple map creation, ensures children can connect learning to their interests. Integrated, multi-sensory activities cater to varied needs, promoting collaboration and confidence.

2. Year One

Autumn Term

Focus: Foundational number concepts and shape recognition. Lessons are scaffolded with frequent breaks for movement or sensory input. Practical resources, such as number lines and physical shapes, support children struggling with abstract concepts. Small, manageable steps in tasks like addition and subtraction ensure children with SEND or behaviour needs feel successful.

• Spring Term

Focus: Place value, measurement, and introducing multiplication and division. Activities such as using real objects (e.g., measuring with cubes) make abstract concepts tangible. Visual schedules and timers support children with behavioural challenges to stay engaged in tasks. Multiplication and division are introduced through interactive games and physical activities, such as grouping and sharing.

• Summer Term

Focus: Exploring fractions and problem-solving with money and time. Lessons integrate everyday contexts, such as play shops or creating simple routines, to build real-life connections. Movement-based activities, such as physically acting out positional language or turns, support kinaesthetic learners and help regulate behaviour.



3. Year Two

Autumn Term

Focus: Place value, addition, subtraction, and shape properties. Tasks are differentiated with clear, visual instructions, and children work at their own pace. Tactile and digital resources, like shape sorters or apps, engage learners who benefit from alternative formats.

• Spring Term

Focus: Applying maths to real-world contexts. Using coins, toys, or food items helps children with SEND understand money concepts. Measurement lessons incorporate physical activities, such as weighing or measuring, to support active engagement.

• Summer Term

Focus: Fractions, time, and data handling. Lessons are scaffolded with visual aids, such as fraction walls or pictograms. Repeated practice and real-life applications, like interpreting simple charts or telling the time on familiar clocks, ensure accessibility for all learners.

4. Year Three

Autumn Term

Focus: Place value, addition, subtraction, and basic multiplication. Practical problem-solving activities are integrated into daily lessons, such as exploring arrays with physical counters. Visual reminders, such as charts or checklists, support self-regulation for children with behaviour needs.

Spring Term

Focus: Multiplication, division, and measurement. Lessons use real-world applications, such as creating perimeters of favourite shapes or comparing weights, to maintain interest. Group activities foster collaboration and social skills.

• Summer Term

Focus: Extending fractions and working with time. Lessons are paced to allow repetition and consolidation. Visual schedules and hands-on tasks, such as creating timelines, help children grasp time concepts and connect maths to daily routines.

5. Year Four

Autumn Term

Focus: Place value, area, and multiplication. Activities incorporate multi-sensory approaches, such as using sand or tactile grids for area calculations. Behavioural scaffolds, like structured rewards, maintain focus during longer tasks.



• Spring Term

Focus: Fractions, decimals, and measurement. Practical tasks, such as measuring objects in the classroom, help children connect maths to their environment. Pair or small-group work supports those with social or emotional challenges.

• Summer Term

Focus: Geometry and consolidating decimals. Creative tasks, such as designing patterns or exploring symmetry with art, cater to diverse interests and learning preferences. Regular breaks and sensory-friendly spaces ensure sustained engagement.

6. Year Five

Autumn Term

Focus: Strengthening place value and introducing fractions. Clear visuals and step-by-step instructions break down complex ideas. Real-life applications, like comparing prices, keep lessons relatable.

• Spring Term

Focus: Advanced fractions, decimals, and percentages. Interactive tools like fraction strips or digital simulations support children with SEND. Lessons include frequent opportunities for feedback and reflection.

• Summer Term

Focus: Geometry and measurement. Lessons are active, involving tasks like creating and reflecting shapes or measuring classroom items. Clear behaviour expectations and calming strategies support children with behaviour challenges.

7. Year Six

Autumn Term

Focus: Mastering foundational concepts and extending fractions and operations. Tasks include collaborative problem-solving with accessible entry points for all abilities. Visual aids like large, colour-coded charts simplify complex ideas.

• Spring Term

Focus: Ratio, algebra, and real-world applications. Lessons use manipulatives and clear scaffolding to ensure accessibility. Structured routines and individualised support plans address behaviour needs.

• Summer Term

Focus: Consolidating all learning through project-based activities. Open-ended tasks, such



as designing a park using geometry and measurement, engage students at their own levels and build confidence.

8. Year Seven

• Autumn Term

Focus: Introducing algebraic thinking and connections between fractions, decimals, and percentages. Visual aids like number lines, manipulatives, and interactive apps ensure that abstract concepts are made tangible. Lessons include collaborative tasks, encouraging social interaction and confidence-building.

• Spring Term

Focus: Applying number operations and exploring fractional thinking. Practical tasks, such as using money or measuring ingredients, link mathematical concepts to everyday contexts. Regular breaks and calming strategies support students with behavioural challenges.

• Summer Term

Focus: Geometric reasoning and number sense. Activities like drawing, constructing, and measuring angles provide hands-on experiences, while small, achievable steps in problem-solving build resilience and engagement.

9. Year Eight

Autumn Term

Focus: Developing proportional reasoning and working with data representations. Ratio and scale are introduced through relatable scenarios like map reading or recipe scaling. Graphical representations are simplified with clear visuals, and group tasks encourage peer support.

Spring Term

Focus: Algebraic techniques and number skills. Concepts like sequences and indices are taught using patterns and real-life examples. Time is allocated for repetition and reinforcement, ensuring students grasp key ideas before moving forward.

• Summer Term

Focus: Advancing geometry and data handling. Creative tasks, such as designing symmetrical patterns or creating bar charts, cater to diverse learning preferences. Structured routines and behaviour strategies keep students on track.

10. Year Nine

• Autumn Term



Focus: Algebraic reasoning and constructing in 2-D and 3-D. Tasks such as creating models with physical materials help students understand geometric concepts. Visual aids and collaborative activities ensure all students can participate meaningfully.

• Spring Term

Focus: Applying numerical reasoning and exploring Pythagoras' theorem. Lessons incorporate step-by-step instructions and hands-on activities, such as measuring objects and applying Pythagoras' theorem to real-world scenarios. Behavioural scaffolds and sensory breaks are included to maintain engagement.

• Summer Term

Focus: Proportional reasoning and probability. Concepts like enlargement, similarity, and probability are introduced using games, role-play scenarios, and interactive tools. Students are encouraged to solve problems in small, manageable steps, with frequent feedback to build confidence.

11. Year Ten

Autumn Term

Focus: Exploring similarity, trigonometry, and advanced algebra. Practical applications, like measuring heights using trigonometric ratios or solving simultaneous equations through reallife problems, make the content accessible. Individualised plans ensure students with SEND can work at their own pace.

Spring Term

Focus: Geometry, vectors, and proportional reasoning. Activities like drawing bearings on maps or representing vectors graphically engage kinaesthetic learners. Collaborative tasks allow students to build social skills while exploring mathematical concepts.

• Summer Term

Focus: Data handling and refining numerical skills. Lessons integrate real-world scenarios, such as analysing data sets or solving financial problems. Regular revision sessions with differentiated materials ensure students can consolidate their learning effectively.

12. Year Eleven

Autumn Term

Focus: Advanced graph skills, algebraic techniques, and understanding functions. Lessons use visual aids like graphing software, tactile resources, and scaffolded tasks to ensure accessibility. Real-world applications, such as interpreting distance-time graphs, provide relevance and context.

• Spring Term



Focus: Developing reasoning skills and proof. Concepts like geometric reasoning, proportional reasoning, and algebraic proofs are broken into manageable chunks. Structured group work fosters collaborative problem-solving, while sensory-friendly tools help students stay focused.

• Summer Term

Focus: Final revision, consolidation, and examinations. Revision is tailored to individual needs, with differentiated resources and clear, structured plans. Sessions focus on exam techniques, problem-solving strategies, and building confidence. Students receive additional support, such as extended time or alternative assessment methods, where necessary.

13. Key Adaptations for SEND and Behavioural Challenges

⇒ Multi-Sensory Approaches

Lessons are designed to engage multiple senses simultaneously, incorporating tactile resources like counters, 3-D models, and textured shapes, alongside visual aids such as diagrams, colour-coded charts, and interactive whiteboards. Auditory components, including verbal explanations, rhythmic patterns, and music, further enhance understanding. For kinaesthetic learners, movement-based activities like acting out problems or constructing shapes are integrated to keep learning active and engaging.

⇒ Sma<mark>ll</mark>, Achievable Steps

To ensure children feel successful, concepts are broken into manageable stages with clear, concise instructions. Each step is reinforced through guided practice before moving to the next level of complexity. Tasks are scaffolded with opportunities for repetition and overlearning, which helps children master foundational skills without feeling overwhelmed. Progression is flexible, allowing children to revisit previous steps as needed.

⇒ **Practical Applications**

Mathematical concepts are linked to real-world scenarios to make learning meaningful and relatable. Activities like budgeting with play money, measuring ingredients for cooking, or creating maps with scale help children see the relevance of maths in everyday life. Hands-on experiments, such as using water to demonstrate capacity or building models to explore geometry, bring abstract ideas to life and encourage curiosity.

⇒ Structured Routines

Predictability is key for children with behavioural challenges. Lessons follow consistent structures, including clear beginnings, step-by-step instructions, and defined endings. Visual schedules and timers are used to outline activities, reducing anxiety and supporting transitions between tasks. Routine check-ins help children understand expectations and manage their time effectively.

\Rightarrow Individualised Support

Each child's unique needs are addressed through personalised learning plans that include



7

targeted interventions and differentiated resources. Regular progress reviews ensure adaptations are effective, while one-to-one or small-group support provides additional scaffolding for those who need it. Teachers work closely with support staff, families, and specialists to align strategies across home and school environments.

\Rightarrow Calm and Inclusive Environment

Classrooms are designed to be sensory-friendly, offering quiet zones with soft lighting and minimal distractions. Flexible seating options, such as wobble cushions or standing desks, accommodate diverse physical and sensory needs. Positive reinforcement strategies, such as reward charts or verbal praise, are used to celebrate effort and achievements, promoting a growth mindset. Opportunities for self-regulation, including sensory breaks or access to calming tools, help children manage emotions and maintain focus.

\Rightarrow Encouragement of Peer Collaboration

Collaborative activities are designed to foster teamwork and communication skills. Children work in mixed-ability groups to share ideas, support each other, and build social connections. Structured group roles, such as "recorder" or "checker," help children focus on specific responsibilities and reduce conflict. Peer mentoring opportunities enable children to learn from one another, enhancing both confidence and academic progress.

⇒ Integration of Technology

Interactive tools like tablets, online platforms, and educational apps provide engaging ways for children to access learning. Adaptive technology, such as screen readers or text-to-speech software, ensures accessibility for children with additional needs. Virtual manipulatives, like online number grids or graphing tools, allow children to explore concepts in a dynamic and interactive format.

⇒ Emphasis on Emotional Wellbeing

Lessons incorporate social and emotional learning (SEL) strategies to support children's confidence and resilience. Activities like discussing growth mindset, practicing mindfulness, or reflecting on successes help children develop a positive attitude toward challenges. Teachers create a safe and nurturing environment where children feel valued and understood.

⇒ Focus on Strength-Based Learning

Children's strengths are highlighted to boost motivation and self-esteem. For example, a child who excels in art may use drawing to explain geometry concepts, while one with a talent for storytelling might create word problems for others to solve. By connecting maths to children's interests and abilities, teachers foster a sense of ownership and pride in learning.

⇒ Flexibility in Assessment

Assessments are adapted to suit diverse needs, offering options like oral responses, practical demonstrations, or visual presentations alongside written tests. Alternative assessments focus on progress over perfection, celebrating individual growth. Teachers provide constructive feedback, helping children identify areas for improvement while recognising their achievements.



\Rightarrow Collaboration with Families and Specialists

Regular communication with families ensures that learning strategies align with children's home environments. Collaboration with specialists, such as occupational therapists or speech-language pathologists, ensures that interventions are holistic and effective. Parent workshops and resources empower families to support their children's mathematical development at home.

\Rightarrow Celebrating Success and Building Confidence

Every achievement, no matter how small, is celebrated through praise, rewards, or showcasing work in the classroom. This positive reinforcement helps build confidence and a sense of belonging. Teachers encourage a growth mindset, emphasising that mistakes are part of learning, and that perseverance leads to success.



