MacIntyre Academies
Venture Academy

Long-Term Curriculum Overview: Mathematics
Key Stage(s): 3
Curriculum Lead: Layla Shepherd
Academic Year: 2025-2026

Curriculum Intent

Our curriculum aims to nurture the whole child, supporting emotional wellbeing, resilience, and positive mental health. We focus on creating safe, inclusive environments where pupils with SEMH needs can thrive academically and personally. The curriculum is personalised and underpinned by strong relationships and consistency.

Curriculum Implementation

- Structured Routine: Clear, consistent lessons to support the reduction of anxiety and increase engagement.
- Therapeutic Approaches: Use of Zones of Regulation.
- Adapted Curriculum: Use of accessible activities and adapted scaffolding to meet the needs of all learners.
- Environment: Calming, sensory-aware settings.

Curriculum Impact

- Pupils develop emotional literacy and self-regulation.
- Increased engagement and attendance.
- Reduced behavioural incidents.
- Positive relationships with peers and adults.
- Preparation for transitions and independence.

Term	Topic / Learning Focus	Links towards EHCP Outcomes	Independent Skills Development	Assessment / Reflection of Learning	Resources / Programmes Used
Autumn 1	**Sequences**	**Communication and interaction**: Students discuss and explain patterns using mathematical vocabulary, supporting language development. **Cognition and learning**: Breaking down complex patterns into manageable steps builds systematic thinking skills. **Social, emotional and mental health**: Pattern recognition provides structure and predictability, supporting emotional regulation through mathematical routine.	Students will independently identify patterns, create their own sequences, and use systematic approaches to find missing terms. They'll develop problem-solving strategies and build confidence through structured exploration of mathematical patterns.	Observations during practical activities with manipulatives, questioning techniques to assess understanding, peer discussions about patterns, written tasks showing sequence continuation, and reflection journals on pattern-spotting strategies.	Cubes and counters for concrete representation, visual sequence cards, interactive whiteboards for pattern display, calculators for complex sequences, structured worksheets with visual supports, and pattern-making materials.
Autumn 2	**Algebraic Notation**	**Communication and interaction**: Mathematical language development through expressing function operations verbally and in writing.	Students will independently operate function machines, substitute values into expressions, and create their own	Practical function machine activities, questioning about algebraic processes, written substitution exercises, peer teaching of function	Physical function machine resources, algebra tiles or cubes for variable representation, calculators for complex

		Cognition and learning: Abstract thinking development through moving from concrete numbers to algebraic symbols. **Social, emotional and mental health**: Function machines provide clear, logical structure that supports students who need predictable mathematical processes.	algebraic expressions. They'll develop logical reasoning skills and systematic approaches to problem-solving with variables.	concepts, and self-assessment checklists for algebraic notation understanding.	substitutions, visual aids showing algebraic notation conventions, and step-by-step process cards for substitution methods.
Spring 1	**Expressions and Equations**	**Communication and Interaction**: Using precise mathematical vocabulary (equation, expression, coefficient, variable) **Cognition and Learning**: Breaking down complex problems into manageable steps, pattern recognition, logical reasoning **Social, emotional and mental health**: Building confidence through	Problem-solving strategies using inverse operations Self-checking solutions by substitution Using bar models and visual representations independently Developing algebraic thinking	Observation of problem-solving approaches Peer assessment using "show your working" displays Exit tickets with one equation to solve Learning logs reflecting on "what I found challenging today	Algebra tiles for hands-on manipulation Bar models and visual aids Function machines Cups and counters for concrete representation Calculators for complex calculations Individual whiteboards for

		structured problem-solving, celebrating small wins with each solved equation	and abstract reasoning Building perseverance when equations don't solve immediately	Practical application problems in real contexts	immediate feedback Zones of Regulation check-ins during problem-solving
Spring 2	**Place Value, Ordering and Rounding**	**Communication and Interaction**: Reading and interpreting large numbers, explaining reasoning clearly **Cognition and Learning**: Understanding place value concepts, spatial awareness with number lines, pattern recognition **Sensory/Physical Needs**: Visual and tactile learning through place value charts and number line activities	Estimating and checking reasonableness of answers Using appropriate degrees of accuracy for different contexts Reading scales and interpreting data independently Making connections between fractions, decimals, and real-world measurements Developing number sense and fluency	Practical measurement tasks using digital scales Number line positioning games "Convince me" reasoning tasks Real-world context problems (populations, distances, money) Reflection journals on "when would I round to the nearest 10 vs 100?" Peer teaching moments	Place value charts and grids Physical number lines and measuring equipment Digital scales and measuring jugs Calculators for exploration Real-world data sets (population figures, astronomical distances) Sensory tools for students who benefit from tactile learning

					Visual schedules and routine cards
Summer 1					
Summer 2					