

KS3 Maths Curriculum - Year A (2026-27)

3-Year Rolling Programme | 75 x 45-minute sessions | Mondays & Wednesdays

Progression model: Secure -> Connect -> Apply -> Reason -> Generalise

Progressive KS3 Maths: Our three-year rolling KS3 Maths programme follows a spiral approach. Essential concepts are deliberately revisited so pupils can strengthen understanding before progressing to increasingly complex applications, reasoning, problem solving and generalisation. Returning learners therefore build on previous knowledge and make new mathematical connections rather than simply repeating earlier work, while developing secure foundations for future GCSE study.

Autumn Term 2026

28 sessions | 7 September - 16 December | Half term: 26-30 October

Ses s.	Date	Unit	Session focus	Progressive curriculum objective
1	Mon 7 Sept	Extending Number Fluency & Reasoning	Number Sense: How Numbers Behave	Strengthen understanding of magnitude and place value, then apply this to ordering, comparing and reasoning with increasingly complex integers and decimals.
2	Wed 9 Sept	Extending Number Fluency & Reasoning	Negative Numbers: Reasoning Across Zero	Extend previous understanding of negative numbers into all four operations, using number relationships and contexts to explain and justify solutions.
3	Mon 14 Sept	Extending Number Fluency & Reasoning	Order of Operations: Does Order Matter?	Apply operation priority accurately to increasingly complex expressions involving brackets, powers and multiple operations; identify and explain common misconceptions.
4	Wed 16 Sept	Extending Number Fluency & Reasoning	Exploring Number Structure	Deepen understanding of factors, multiples and primes; use prime factorisation to investigate number relationships and solve HCF/LCM problems.
5	Mon 21 Sept	Extending Number Fluency & Reasoning	Powers, Roots & Number Connections	Connect squares, cubes and roots to multiplication and number structure; recognise patterns and derive unfamiliar values from known facts.
6	Wed 23 Sept	Extending Number Fluency & Reasoning	Approximation With Purpose	Use rounding, decimal places and significant figures appropriately. Select a suitable degree of accuracy and evaluate the effect of rounding.
7	Mon 28 Sept	Extending Number Fluency & Reasoning	Efficient Calculation: Choose Your Strategy	Compare mental, written and calculator approaches and select efficient methods rather than automatically applying a procedure.
8	Wed 30 Sept	Extending Number Fluency & Reasoning	Number Reasoning Master Challenge	Combine negative numbers, powers, number structure, approximation and calculation in unfamiliar multi-step reasoning problems.
9	Mon 5 Oct	Algebraic Thinking: Arithmetic to Generalisation	Algebra: Representing Relationships	Move confidently between words, arithmetic and algebraic notation. Understand variables as quantities rather than simply letters in maths.
10	Wed 7 Oct	Algebraic Thinking: Arithmetic to Generalisation	Simplifying With Understanding	Develop fluency collecting like terms and manipulating expressions while explaining why particular terms can or cannot be combined.
11	Mon 12 Oct	Algebraic Thinking: Arithmetic to Generalisation	Substitution & Changing Values	Substitute positive and negative values into increasingly complex expressions and investigate how changing variables affects outputs.
12	Wed 14 Oct	Algebraic Thinking: Arithmetic to Generalisation	Building Algebraic Expressions	Translate mathematical and real-life relationships into algebraic expressions rather than only manipulating expressions already provided.
13	Mon 19 Oct	Algebraic Thinking: Arithmetic to Generalisation	Equations: Maintaining the Balance	Strengthen equation solving through inverse operations and the balance model, progressing into increasingly complex one- and two-step equations.
14	Wed 21 Oct	Algebraic Thinking: Arithmetic to Generalisation	Algebra Reasoning & Error Detectives	Analyse incorrect algebra, solve missing-value problems and justify whether algebraic statements are always, sometimes or never true.
15	Mon 2 Nov	FDP: Deepening the Connections	Fraction Fluency: Rebuilding Through Reasoning	Secure equivalence and fraction magnitude before applying them to comparison, ordering and increasingly complex reasoning problems.
16	Wed 4 Nov	FDP: Deepening the Connections	Adding & Subtracting Fractions Efficiently	Move beyond following a procedure to selecting efficient common denominators and explaining why equivalence is required.
17	Mon 9 Nov	FDP: Deepening the Connections	Multiplying & Dividing Fractions: Why Does It Work?	Develop conceptual understanding alongside procedural fluency and apply fraction operations to unfamiliar problems.
18	Wed 11 Nov	FDP: Deepening the Connections	Decimal Fluency & Precision	Strengthen operations with decimals and place-value understanding; identify misconceptions and evaluate whether answers are reasonable.
19	Mon 16 Nov	FDP: Deepening the Connections	Connecting Fractions, Decimals & Percentages	Move flexibly between representations and derive unfamiliar equivalents from known relationships.
20	Wed 18 Nov	FDP: Deepening the Connections	Percentage Strategies: Work Smarter	Develop efficient mental and written strategies for finding percentages rather than relying on one fixed procedure.

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21	Mon 23 Nov	FDP: Deepening the Connections	Percentage Change & Real-Life Reasoning	Apply percentage increase and decrease to realistic contexts and reason about the relationship between original and changed quantities.
22	Wed 25 Nov	FDP: Deepening the Connections	FDP Connections Challenge	Select between fractions, decimals and percentages to solve multi-step problems and justify which representation is most useful.
23	Mon 30 Nov	Proportional Reasoning	Ratio as a Relationship	Develop ratio beyond notation by interpreting multiplicative relationships between quantities and connecting these to fractions.
24	Wed 2 Dec	Proportional Reasoning	Equivalent Ratios & Scaling	Generate and simplify equivalent ratios using multiplicative reasoning and apply them to missing-value problems.
25	Mon 7 Dec	Proportional Reasoning	Sharing in a Ratio: Understanding the Structure	Develop a conceptual method for ratio sharing and progress into increasingly complex totals and contexts.
26	Wed 9 Dec	Proportional Reasoning	Scaling & Proportion	Apply multiplicative relationships to scaling quantities, recipes, diagrams and other proportional contexts.
27	Mon 14 Dec	Proportional Reasoning	Ratio, Fractions & Percentages: One Big Connection	Connect different representations of proportional relationships and move flexibly between ratio, fractions and percentages.
28	Wed 16 Dec	Proportional Reasoning	Autumn Maths Master Challenge	Apply number, algebra, FDP and proportional reasoning to unfamiliar problems requiring pupils to decide independently which mathematics to use.