

WHOLE-YEAR OVERVIEW – 2026–2027

Subject Area Topic: Year 10 Mathematics

Four 45-minute lessons per week. The final two weeks of each half term are protected for assessment/checkpoint and misconception teaching.

Half Term / Theme	Core Curriculum Focus	Teaching Weeks	Assessment Cycle	Length
Autumn 1 'Equality & Diversity'	Core Number and Algebra Foundations	Number sense; fractions; decimals; percentages; ratio; algebra foundations.	Checkpoint + misconceptions	8
Autumn 2 'Living in the Wider World'	Geometry and Measures	Units; perimeter/area; circles; volume/surface area; angles.	Assessment + misconceptions	7
Spring 1 'The Circle of Life'	Statistics and Probability	Averages; charts; scatter graphs; probability; two-way tables; Venn and trees.	Checkpoint + misconceptions	6
Spring 2 'Conflict'	Graphs, Sequences and Transformations	Coordinates; straight lines; nth term; reflection, rotation, translation and enlargement.	Assessment + misconceptions	5
Summer 1 'Health & Leisure'	Proportional Reasoning and Right-Angle Geometry	Percentage change; direct proportion; compound measures; Pythagoras; trigonometry.	Checkpoint + misconceptions	7
Summer 2 'Crime & Punishment'	Algebra Consolidation and Grade 4 Bridge	Indices; standard form; expand/factorise; equations/inequalities; formulae; graph bridge.	Assessment + misconceptions	7

Fluency

Secure the essential method through carefully varied practice.

Apply

Use the method in context, choose information or complete more than one step.

Mastering

Explain, compare, justify, generalise or solve an unfamiliar problem.

Autumn 1 – 'Equality & Diversity'

Subject Area Topic: Core Number and Algebra Foundations | Weeks 1-3 of 8

Length		8 weeks	Teaching time		32 lessons
Assessment		Week 7 Checkpoint; Week 8 Misconceptions	Core purpose		Secure arithmetic, proportional and algebraic foundations.
Week	Subject Area Topic and Four Lessons	Fluency - Apply - Mastering	Notes / Links / Interleaving	Access / Additional Higher Content	
1	Number sense and calculation Secure place value, operations and directed number. L1: Place value; order integers and decimals; read scales. L2: Mental and written addition, subtraction, multiplication and division. L3: Negative numbers and order of operations in accessible steps. L4: Calculator and non-calculator checking; apply the four operations to money, temperature and short multi-step problems.	Fluency: Accurate one-step calculations with integers. Apply: Money, temperature and multi-step contexts. Mastering: Error analysis and order of operations including negatives.	Vocabulary: integer, place value, operation, inverse, product, quotient. Retrieve: times tables, number bonds.	Access: place-value grids, number lines, multiplication squares, calculator only when stated. Additional Higher Content: Error analysis and order of operations including negatives.	
2	Fractions foundations Understand equivalence before calculation. L1: Equivalent fractions, simplifying and ordering using visual models. L2: Fractions of amounts using bar models and known facts. L3: Add and subtract fractions; common denominators introduced carefully. L4: Multiply and divide simple fractions; complete mixed fraction practice and explain one chosen method.	Fluency: Equivalent fractions and fractions of simple amounts. Apply: Add/subtract unlike fractions and solve short contexts. Mastering: Multiply/divide simple fractions and justify method.	Vocabulary: numerator, denominator, equivalent, simplify, common denominator. Retrieve: factors and multiples.	Access: fraction walls, bar models, pre-drawn diagrams, 12x12 facts. Additional Higher Content: Multiply/divide simple fractions and justify method.	
3	Decimals and FDP equivalence Connect fractions, decimals and percentages. L1: Decimal place value; compare, order and round. L2: Convert common fractions, decimals and percentages. L3: Multiply/divide by 10, 100 and 1000; decimal calculation. L4: Apply decimal and FDP knowledge to money and measure problems; complete a short progress check.	Fluency: Common FDP conversions and decimal place value. Apply: Mixed-format ordering and decimal money problems. Mastering: Non-unit fractions and multi-step decimal calculations.	Vocabulary: decimal, tenth, hundredth, percentage, equivalent, round. Retrieve: fraction equivalence.	Access: conversion grids, place-value counters, calculators for checking. Additional Higher Content: Non-unit fractions and multi-step decimal calculations.	
Notes / Links / Interleaving: Retrieval is cumulative and selected from prior learning and assessment evidence.			Additional Higher Content: Deepen the same concept through explanation, proof, generalisation and unfamiliar problems.		

Autumn 1 – 'Equality & Diversity'

Subject Area Topic: Core Number and Algebra Foundations | Weeks 4-6 of 8

Length		8 weeks	Teaching time		32 lessons
Assessment		Week 7 Checkpoint; Week 8 Misconceptions	Core purpose		Secure arithmetic, proportional and algebraic foundations.
Week	Subject Area Topic and Four Lessons	Fluency - Apply - Mastering	Notes / Links / Interleaving	Access / Additional Higher Content	
4	Percentages Calculate and interpret percentages. L1: Find 10%, 5%, 1% and build other percentages. L2: Percentage of an amount using non-calculator and calculator methods. L3: Percentage increase and decrease in practical contexts. L4: Mixed percentage problems: choose between build-up and calculator methods and explain the choice.	Fluency: Find familiar percentages of whole-number amounts. Apply: Percentage change and short exam questions. Mastering: Reverse percentage introduced through bar models.	Vocabulary: percent, amount, increase, decrease, multiplier, original. Retrieve: FDP conversions.	Access: percentage bars, unitary method, money contexts. Additional Higher Content: Reverse percentage introduced through bar models.	
5	Ratio and proportion foundations Represent, simplify and share. L1: Write and simplify ratios; connect ratio to fractions. L2: Share an amount in a given ratio using bar models. L3: Scale recipes and use the unitary method. L4: Direct proportion tables, best buys and mixed ratio problems with a short progress check.	Fluency: Simplify ratios and share with integer answers. Apply: Recipe, map and best-buy contexts. Mastering: Missing ratio problems and direct proportion tables.	Vocabulary: ratio, part, whole, share, scale, proportion, unitary. Retrieve: factors, fractions and division.	Access: counters, double number lines, bar models, practical mixing. Additional Higher Content: Missing ratio problems and direct proportion tables.	
6	Algebra foundations Move from arithmetic to symbolic reasoning. L1: Use algebraic notation; identify terms and collect like terms. L2: Substitute into expressions and simple formulae. L3: Solve one-step and two-step linear equations. L4: Form simple expressions and equations from perimeter, money and worded contexts.	Fluency: Collect positive like terms and substitute integers. Apply: Two-step equations and simple contextual formulae. Mastering: Equations with brackets or the unknown on both sides.	Vocabulary: term, expression, equation, variable, coefficient, substitute, solve. Retrieve: inverse operations.	Access: algebra tiles, balance models, worked-example fading. Additional Higher Content: Equations with brackets or the unknown on both sides.	
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Autumn 1 – 'Equality & Diversity'

Subject Area Topic: Core Number and Algebra Foundations | Weeks 7-8 of 8

Length		8 weeks	Teaching time		32 lessons
Assessment		Week 7 Checkpoint; Week 8 Misconceptions	Core purpose		Secure arithmetic, proportional and algebraic foundations.
Week	Subject Area Topic and Four Lessons	Fluency - Apply - Mastering	Notes / Links / Interleaving		Access / Additional Higher Content
7	CHECKPOINT WEEK L1: Guided cumulative revision using retrieval data and modelled examples. L2: HT1 checkpoint: one accessible cumulative paper completed under agreed conditions. L3: Teacher modelling of selected questions, pupil corrections and question-level analysis. L4: Targeted consolidation using the question-level analysis, followed by individual next-step questions.	Fluency: Core questions demonstrate secure Grade 1-2 knowledge. Apply: Routine GCSE Foundation applications. Mastering: Selected Grade 3-4 reasoning questions.	Vocabulary: Retrieve:		Access: Assessment evidence should identify strengths and precise next steps. Avoid reteaching the entire paper in one lesson. Additional Higher Content: Selected Grade 3-4 reasoning questions.
8	MISCONCEPTIONS WEEK L1: Reteach highest-frequency Number misconception identified by the checkpoint. L2: Reteach highest-frequency Fractions/Ratio misconception. L3: Reteach the highest-frequency Algebra misconception identified by the checkpoint. L4: Complete an independent recheck across Number, Fractions/Ratio and Algebra; record next retrieval targets.	Fluency: Concrete and pictorial rebuild. Apply: Same concept in a new context. Mastering: Explain the error and generalise the corrected rule.	Vocabulary: Retrieve:		Access: Use question-level analysis. Pupils correct original errors in a different colour and complete fresh examples rather than copying model answers. Additional Higher Content: Explain the error and generalise the corrected rule.
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Autumn 2 – 'Living in the Wider World'

Subject Area Topic: Geometry and Measures | Weeks 1-4 of 7

Length		7 weeks		Teaching time		28 lessons	
Assessment		Week 6 Assessment; Week 7 Misconceptions		Core purpose		Apply geometry and measures accurately in practical and exam contexts.	
Week	Subject Area Topic and Four Lessons		Fluency - Apply - Mastering		Notes / Links / Interleaving		Access / Additional Higher Content
1	Units, estimation and scale Choose and convert appropriate measures. L1: Metric units of length, mass and capacity; choose sensible units. L2: Convert within metric units using place value. L3: Time calculations, timetables and simple scale drawings. L4: Apply conversions, time and scale to practical and Foundation-style problems.		Fluency: Convert familiar metric units. Apply: Multi-step time and scale problems. Mastering: Mixed-unit problems and bounds through sensible estimation.		Vocabulary: metric, convert, scale, estimate, length, mass, capacity. Retrieve: place value and x/divide by powers of 10.		Access: measuring equipment, conversion ladders, real packaging. Additional Higher Content: Mixed-unit problems and bounds through sensible estimation.
2	Perimeter and area Measure and calculate 2D space. L1: Perimeter of rectangles and compound rectilinear shapes. L2: Area of rectangles, triangles and parallelograms. L3: Area and perimeter of compound shapes; missing lengths. L4: Mixed area and perimeter exam questions, including reverse and comparison problems.		Fluency: Use formulae with all dimensions given. Apply: Compound shapes and reverse problems. Mastering: Compare designs and justify efficient solutions.		Vocabulary: perimeter, area, base, height, perpendicular, compound. Retrieve: multiplication and units.		Access: squared paper, cut-and-rearrange models, formula mats. Additional Higher Content: Compare designs and justify efficient solutions.
3	Circles Use radius, diameter and pi. L1: Parts of a circle; radius and diameter relationships. L2: Circumference using pi and a calculator. L3: Area of a circle and simple reverse questions. L4: Semicircles, quarter circles and simple composite circle problems.		Fluency: Substitute into circumference/area formulae. Apply: Find missing radius or diameter; contextual problems. Mastering: Semicircles, quarter circles and simple composite shapes.		Vocabulary: radius, diameter, circumference, area, pi. Retrieve: substitution and calculator use.		Access: physical circles, string measurement, labelled diagrams. Additional Higher Content: Semicircles, quarter circles and simple composite shapes.
4	Volume and surface area Reason with 3D measures. L1: Properties and nets of cubes, cuboids and prisms. L2: Volume of cuboids and simple prisms. L3: Surface area of cuboids from nets and formulae. L4: Mixed volume and surface-area problems, including a missing dimension where appropriate.		Fluency: Count faces and calculate cuboid volume. Apply: Missing dimensions and practical packaging. Mastering: Volume of triangular prisms and comparison problems.		Vocabulary: face, edge, vertex, prism, volume, surface area, net. Retrieve: area and multiplication.		Access: physical solids, deconstructed boxes, unit cubes. Additional Higher Content: Volume of triangular prisms and comparison problems.
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Autumn 2 - 'Living in the Wider World'

Subject Area Topic: Geometry and Measures | Weeks 5-7 of 7

Length		7 weeks	Teaching time		28 lessons
Assessment		Week 6 Assessment; Week 7 Misconceptions	Core purpose		Apply geometry and measures accurately in practical and exam contexts.
Week	Subject Area Topic and Four Lessons	Fluency - Apply - Mastering	Notes / Links / Interleaving	Access / Additional Higher Content	
5	Angles and properties of shape Use connected angle facts. L1: Angles on a line, around a point and vertically opposite. L2: Angles in triangles and quadrilaterals; classify shapes. L3: Parallel-line angles and simple polygon problems. L4: Mixed angle reasoning with written reasons and a short progress check.	Fluency: Single-step missing angles. Apply: Two-step diagrams with reasons. Mastering: Parallel lines, interior polygon angles and written justification.	Vocabulary: angle, degree, parallel, corresponding, alternate, co-interior, polygon. Retrieve: arithmetic and equation solving.	Access: colour coding, tracing paper, angle fact cards. Additional Higher Content: Parallel lines, interior polygon angles and written justification.	
6	ASSESSMENT WEEK L1: Guided revision across units, area, circles, volume and angles. L2: HT2 assessment: cumulative Foundation-style paper with prior-learning retrieval. L3: Teacher modelling of selected questions, pupil corrections and question-level analysis. L4: Complete targeted consolidation from the question-level analysis and correct one selected exam question independently.	Fluency: Secure methods and units. Apply: Routine mixed geometry contexts. Mastering: Multi-step Grade 3-4 problems.	Vocabulary: Retrieve:	Access: Build in calculator familiarisation and explicit command-word teaching. Additional Higher Content: Multi-step Grade 3-4 problems.	
7	MISCONCEPTIONS WEEK L1: Reteach top measurement/unit misconception. L2: Reteach top area/circle/volume misconception. L3: Reteach the highest-frequency angle misconception identified by the assessment. L4: Complete a short independent recheck and add unresolved gaps to cumulative retrieval.	Fluency: Concrete and diagram-first reconstruction. Apply: Apply corrected method independently. Mastering: Diagnose and explain common errors.	Vocabulary: Retrieve:	Access: The three lessons must be driven by the assessment analysis, not by a pre-written generic revision pack. Additional Higher Content: Diagnose and explain common errors.	
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Spring 1 - 'The Circle of Life'

Subject Area Topic: Statistics and Probability | Weeks 1-3 of 6

Length		6 weeks	Teaching time		24 lessons
Assessment		Week 5 Checkpoint; Week 6 Misconceptions	Core purpose		Read, represent and reason from data and chance.
Week	Subject Area Topic and Four Lessons	Fluency - Apply - Mastering	Notes / Links / Interleaving	Access / Additional Higher Content	
1	Data and averages Summarise and compare data. L1: Data types, tally charts and frequency tables. L2: Mean, median, mode and range from lists. L3: Averages from frequency tables and choosing an appropriate average. L4: Compare two data sets using averages and range; solve an accessible reverse-mean problem where secure.	Fluency: Calculate averages from small data sets. Apply: Frequency tables and comparison statements. Mastering: Reverse mean problems and critique misleading summaries.	Vocabulary: data, frequency, mean, median, mode, range, discrete, continuous. Retrieve: four operations and division.	Access: ordered lists, counters, calculator checking. Additional Higher Content: Reverse mean problems and critique misleading summaries.	
2	Representing data Read and construct common diagrams. L1: Bar charts, pictograms and dual bar charts. L2: Pie charts and time-series graphs. L3: Scatter graphs, correlation and line of best fit. L4: Interpret and critique data displays, including misleading scales and interpolation/extrapolation where appropriate.	Fluency: Read values and complete scales. Apply: Construct diagrams and make comparisons. Mastering: Interpolation/extrapolation and evaluating misleading graphs.	Vocabulary: axis, scale, frequency, sector, correlation, positive, negative, line of best fit. Retrieve: angles and percentages.	Access: pre-drawn axes, graph templates, real school data. Additional Higher Content: Interpolation/extrapolation and evaluating misleading graphs.	
3	Probability foundations Quantify chance accurately. L1: Probability scale, language and single-event probability. L2: List outcomes and use sample-space diagrams. L3: Two-way tables and finding missing frequencies/probabilities. L4: Mixed probability exam practice using fractions, sample spaces and two-way tables.	Fluency: Write simple probabilities as fractions. Apply: Sample spaces and two-way-table questions. Mastering: Combined events and complementary probability.	Vocabulary: outcome, event, probability, certain, impossible, equally likely, sample space. Retrieve: fractions and percentages.	Access: coins, dice, spinners, structured tables. Additional Higher Content: Combined events and complementary probability.	
Notes / Links / Interleaving: Retrieval is cumulative and selected from prior learning and assessment evidence.			Additional Higher Content: Deepen the same concept through explanation, proof, generalisation and unfamiliar problems.		

Spring 1 - 'The Circle of Life'

Subject Area Topic: Statistics and Probability | Weeks 4-6 of 6

Length		6 weeks		Teaching time		24 lessons		
Assessment		Week 5 Checkpoint; Week 6 Misconceptions		Core purpose		Read, represent and reason from data and chance.		
Week	Subject Area Topic and Four Lessons		Fluency - Apply - Mastering		Notes / Links / Interleaving		Access / Additional Higher Content	
4	Venn diagrams, trees and experiments Organise combined events. L1: Interpret and complete two-set Venn diagrams. L2: Simple probability tree diagrams with replacement. L3: Experimental probability and relative frequency. L4: Mixed Venn, tree and experimental-probability questions with method selection.		Fluency: Place values in regions and complete branches summing to 1. Apply: Find combined probabilities in familiar contexts. Mastering: Without-replacement trees or simple set notation where secure.		Vocabulary: intersection, union, mutually exclusive, branch, replacement, relative frequency. Retrieve: sample spaces and fractions.		Access: hoops, sorting cards, branch templates, repeated practical trials. Additional Higher Content: Without-replacement trees or simple set notation where secure.	
5	CHECKPOINT WEEK L1: Guided revision using short data and probability stations. L2: HT3 checkpoint: cumulative paper including selected HT1-2 retrieval. L3: Teacher modelling of selected questions, pupil corrections and question-level analysis. L4: Targeted consolidation using the question-level analysis and individual next-step questions.		Fluency: Accurate reading of tables and diagrams. Apply: Routine Foundation calculations and comparisons. Mastering: Multi-step probability and interpretation.		Vocabulary: Retrieve:		Access: Check reading accuracy, scale use and mathematical vocabulary as well as calculation. Additional Higher Content: Multi-step probability and interpretation.	
6	MISCONCEPTIONS WEEK L1: Reteach highest-frequency averages or chart misconception. L2: Reteach highest-frequency probability representation misconception. L3: Reteach the highest-frequency combined-event misconception. L4: Complete a short independent recheck and add persistent gaps to retrieval.		Fluency: Visual reconstruction. Apply: Fresh examples in a changed context. Mastering: Explain why an incorrect conclusion is misleading.		Vocabulary: Retrieve:		Access: Use pupils own erroneous examples anonymously to support error analysis. Additional Higher Content: Explain why an incorrect conclusion is misleading.	
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Spring 2 – 'Conflict'

Subject Area Topic: Graphs, Sequences and Transformations | Weeks 1-3 of 5

Length		5 weeks		Teaching time		20 lessons	
Assessment		Week 4 Assessment; Week 5 Misconceptions		Core purpose		Connect diagrams, tables, coordinates and algebraic rules.	
Week	Subject Area Topic and Four Lessons		Fluency - Apply - Mastering		Notes / Links / Interleaving		Access / Additional Higher Content
1	Coordinates and straight-line graphs Represent relationships visually. L1: Coordinates in four quadrants and reading scales. L2: Complete value tables and plot linear graphs. L3: Gradient and intercept; recognise $y = mx + c$. L4: Use and interpret $y = mx + c$ in mixed straight-line graph questions and complete a progress check.		Fluency: Plot points and read coordinates. Apply: Draw straight lines from tables and interpret context. Mastering: Find an equation from a graph and compare gradients.		Vocabulary: coordinate, axis, quadrant, gradient, intercept, linear, equation. Retrieve: substitution and negative numbers.		Access: large grids, colour-coded axes, step-by-step plotting. Additional Higher Content: Find an equation from a graph and compare gradients.
2	Sequences Describe and generalise patterns. L1: Continue arithmetic and visual sequences; term-to-term rules. L2: Find the n th term of linear sequences. L3: Use n th term to generate terms and test whether a number belongs. L4: Mixed linear-sequence and visual-pattern questions, including forming and checking n th-term rules.		Fluency: Continue sequences and state term-to-term rules. Apply: Find and use simple n th-term rules. Mastering: Form rules from contextual or diagrammatic patterns.		Vocabulary: sequence, term, rule, difference, position, n th term. Retrieve: times tables and algebra notation.		Access: matchsticks, tiles, structured difference tables. Additional Higher Content: Form rules from contextual or diagrammatic patterns.
3	Transformations Describe movement and change precisely. L1: Reflect and rotate shapes on coordinate grids. L2: Translate shapes and describe using column vectors. L3: Enlarge shapes using positive integer scale factors. L4: Mixed transformation practice: carry out and fully describe transformations using correct vocabulary.		Fluency: Complete transformations on clear grids. Apply: Describe transformations using correct language. Mastering: Fractional enlargement or combined transformations where secure.		Vocabulary: reflection, rotation, centre, translation, vector, enlargement, scale factor. Retrieve: coordinates and shape properties.		Access: tracing paper, mirrors, transparent grids, movement instructions. Additional Higher Content: Fractional enlargement or combined transformations where secure.
Notes / Links / Interleaving: Retrieval is cumulative and selected from prior learning and assessment evidence.				Additional Higher Content: Deepen the same concept through explanation, proof, generalisation and unfamiliar problems.			

Spring 2 – ‘Conflict’

Subject Area Topic: Graphs, Sequences and Transformations | Weeks 4-5 of 5

Length		5 weeks	Teaching time		20 lessons			
Assessment		Week 4 Assessment; Week 5 Misconceptions		Core purpose		Connect diagrams, tables, coordinates and algebraic rules.		
Week	Subject Area Topic and Four Lessons		Fluency - Apply - Mastering		Notes / Links / Interleaving		Access / Additional Higher Content	
4	ASSESSMENT WEEK L1: Guided revision across graphs, sequences and transformations. L2: HT4 assessment: cumulative Foundation-style paper. L3: Teacher modelling of selected questions, pupil corrections and question-level analysis. L4: Complete targeted consolidation from the question-level analysis and correct selected questions independently.		Fluency: Accurate plotting and simple rules. Apply: Routine graph and transformation applications. Mastering: Grade 3-4 algebraic interpretation.		Vocabulary: Retrieve:		Access: Provide separate graph paper and ensure pupils understand equipment expectations. Additional Higher Content: Grade 3-4 algebraic interpretation.	
5	MISCONCEPTIONS WEEK L1: Reteach top coordinate/graph misconception. L2: Reteach top sequence/algebra misconception. L3: Reteach the highest-frequency transformation misconception. L4: Complete a short recheck across graphs, sequences and transformations; record remaining targets.		Fluency: Model with visuals and movement. Apply: Independent fresh examples. Mastering: Explain invariant features and common errors.		Vocabulary: Retrieve:		Access: Use enlarged grids and live modelling rather than dense worksheets. Additional Higher Content: Explain invariant features and common errors.	
Notes / Links / Interleaving: Retrieval is cumulative and selected from prior learning and assessment evidence.				Additional Higher Content: Deepen the same concept through explanation, proof, generalisation and unfamiliar problems.				

Summer 1 - 'Health & Leisure'

Subject Area Topic: Proportional Reasoning and Right-Angle Geometry | Weeks 1-4 of 7

Length		7 weeks		Teaching time		28 lessons	
Assessment		Week 6 Checkpoint; Week 7 Misconceptions		Core purpose		Develop high-value Grade 3-4 proportional and right-angle methods.	
Week	Subject Area Topic and Four Lessons		Fluency - Apply - Mastering		Notes / Links / Interleaving		Access / Additional Higher Content
1	Percentages revisited Increase accuracy and depth. L1: Percentage increase and decrease using build-up methods. L2: Decimal multipliers and calculator methods. L3: Simple interest, repeated change and reverse percentage introduction. L4: Mixed percentage-change exam practice, including simple interest and reverse percentage as Mastering.		Fluency: One-step percentage change. Apply: Money and repeated-change contexts. Mastering: Reverse percentages and selecting an efficient method.		Vocabulary: multiplier, original, new amount, interest, repeated, reverse. Retrieve: common FDP conversions.		Access: percentage bars and calculator key sequences. Additional Higher Content: Reverse percentages and selecting an efficient method.
2	Ratio and direct proportion Scale efficiently. L1: Review sharing and simplify complex-looking ratios. L2: Unitary method, recipes and best buys. L3: Direct proportion tables and graphs. L4: Direct-proportion graphs, unitary method and mixed best-buy problems.		Fluency: Share and scale with integer values. Apply: Best-buy and direct-proportion problems. Mastering: Form a proportional rule or solve unfamiliar contexts.		Vocabulary: unitary, scale, direct proportion, rate, best buy, constant. Retrieve: division and decimals.		Access: double number lines, ratio tables, supermarket examples. Additional Higher Content: Form a proportional rule or solve unfamiliar contexts.
3	Compound measures Connect quantities through formulae. L1: Speed, distance and time using diagrams and formula triangles. L2: Density, mass and volume. L3: Mixed compound-measure problems and unit conversion. L4: Mixed speed and density questions with conversions and method selection.		Fluency: Substitute into one formula with consistent units. Apply: Rearrange simple formula triangles in context. Mastering: Multi-step problems; pressure only as extension.		Vocabulary: speed, distance, time, density, mass, volume, rate. Retrieve: metric conversion and substitution.		Access: formula triangles, worked examples, practical travel contexts. Additional Higher Content: Multi-step problems; pressure only as extension.
4	Pythagoras Find missing lengths in right-angled triangles. L1: Identify hypotenuse and connect squares to side lengths. L2: Calculate a missing hypotenuse. L3: Calculate a shorter side and solve contextual problems. L4: Pythagoras exam practice linked to area, coordinates or practical contexts.		Fluency: Identify sides and substitute into $a^2+b^2=c^2$. Apply: Choose the correct operation and round appropriately. Mastering: Multi-step geometry and coordinate-distance problems.		Vocabulary: right angle, hypotenuse, square, root, theorem. Retrieve: squares, roots and calculator use.		Access: colour-coded sides, physical square models, calculator rehearsal. Additional Higher Content: Multi-step geometry and coordinate-distance problems.
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Summer 1 - 'Health & Leisure'

Subject Area Topic: Proportional Reasoning and Right-Angle Geometry | Weeks 5-7 of 7

Length		7 weeks	Teaching time		28 lessons
Assessment		Week 6 Checkpoint; Week 7 Misconceptions	Core purpose		Develop high-value Grade 3-4 proportional and right-angle methods.
Week	Subject Area Topic and Four Lessons	Fluency - Apply - Mastering	Notes / Links / Interleaving		Access / Additional Higher Content
5	Right-angle trigonometry Use sine, cosine and tangent with support. L1: Label opposite, adjacent and hypotenuse relative to an angle. L2: Find a missing side using SOHCAHTOA. L3: Find a missing angle and choose between Pythagoras/trigonometry. L4: Mixed right-angle problems: decide whether to use Pythagoras or trigonometry and justify the choice.	Fluency: Identify sides and select the correct ratio using a scaffold. Apply: Complete routine missing-side/angle problems. Mastering: Multi-step contexts and bearings only where secure.	Vocabulary: opposite, adjacent, hypotenuse, sine, cosine, tangent. Retrieve: ratio, substitution and calculator mode.		Access: consistent triangle orientation first, formula mats, calculator checks. Additional Higher Content: Multi-step contexts and bearings only where secure.
6	CHECKPOINT WEEK L1: Guided revision focused on percentages, proportion and right-angle methods. L2: HT5 checkpoint: cumulative paper with a clear Grade 4 pathway. L3: Teacher modelling of selected questions, pupil corrections and question-level analysis. L4: Targeted consolidation using question-level analysis and individual next-step questions.	Fluency: Secure high-frequency one-step methods. Apply: Routine Foundation exam contexts. Mastering: Selected Grade 4 multi-step questions.	Vocabulary: Retrieve:		Access: Separate method selection from calculation accuracy when analysing errors. Additional Higher Content: Selected Grade 4 multi-step questions.
7	MISCONCEPTIONS WEEK L1: Reteach highest-frequency percentage/proportion misconception. L2: Reteach highest-frequency compound-measure misconception. L3: Reteach the highest-frequency Pythagoras/trigonometry misconception. L4: Complete a short independent recheck and identify the methods that need continued retrieval.	Fluency: Rebuild with diagrams and familiar numbers. Apply: Apply to a fresh exam-style example. Mastering: Compare methods and justify selection.	Vocabulary: Retrieve:		Access: Use worked-example pairs: incorrect example beside corrected example. Additional Higher Content: Compare methods and justify selection.
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Summer 2 - 'Crime & Punishment'

Subject Area Topic: Algebra Consolidation and Grade 4 Bridge | Weeks 1-3 of 7

Length		7 weeks		Teaching time		28 lessons	
Assessment		Week 6 Assessment; Week 7 Misconceptions		Core purpose		Consolidate Foundation algebra and establish clear Year 11 priorities.	
Week	Subject Area Topic and Four Lessons		Fluency - Apply - Mastering	Notes / Links / Interleaving		Access / Additional Higher Content	
1	Indices and standard form Represent very large and small values. L1: Squares, cubes, roots and positive integer indices. L2: Convert between ordinary numbers and standard form. L3: Multiply/divide simple numbers in standard form with calculator support. L4: Mixed standard-form and indices practice in calculator and science contexts; interpret calculator displays.		Fluency: Recognise powers and write large numbers in standard form. Apply: Convert numbers below 1 and solve science contexts. Mastering: Calculate in standard form and interpret calculator display.	Vocabulary: index, power, base, square, cube, root, standard form. Retrieve: place value and powers of 10.		Access: place-value arrows, calculator display modelling. Additional Higher Content: Calculate in standard form and interpret calculator display.	
2	Expanding and factorising Connect multiplication and algebra. L1: Expand a single bracket using visual area models. L2: Factorise by taking out a numerical or algebraic common factor. L3: Review and choose between expand, simplify and factorise. L4: Mixed expand, simplify and factorise questions; double brackets remain a Mastering route.		Fluency: Expand positive single brackets. Apply: Factorise common factors and handle negatives carefully. Mastering: Expand double brackets as a Grade 4 bridge.	Vocabulary: bracket, expand, factorise, factor, product, term. Retrieve: distributive law and factors.		Access: algebra tiles, area grids, colour-coded multiplication. Additional Higher Content: Expand double brackets as a Grade 4 bridge.	
3	Equations and inequalities Solve and represent unknown values. L1: Equations with brackets and unknowns on one side. L2: Unknown on both sides, beginning with integer solutions. L3: Represent and solve linear inequalities on a number line. L4: Form and solve equations or inequalities from worded and diagrammatic contexts.		Fluency: One/two-step equations and read inequalities. Apply: Brackets, unknown both sides and integer solutions. Mastering: Form equations/inequalities from contexts and justify solution sets.	Vocabulary: equation, inequality, solution, variable, at least, at most. Retrieve: inverse operations and negative numbers.		Access: balance models, inequality cards, number-line templates. Additional Higher Content: Form equations/inequalities from contexts and justify solution sets.	
Notes / Links / Interleaving: Retrieval is cumulative and selected from prior learning and assessment evidence.			Additional Higher Content: Deepen the same concept through explanation, proof, generalisation and unfamiliar problems.				

Summer 2 - 'Crime & Punishment'

Subject Area Topic: Algebra Consolidation and Grade 4 Bridge | Weeks 4-5 of 7

Length		7 weeks	Teaching time		28 lessons
Assessment		Week 6 Assessment; Week 7 Misconceptions	Core purpose		Consolidate Foundation algebra and establish clear Year 11 priorities.
Week	Subject Area Topic and Four Lessons	Fluency - Apply - Mastering	Notes / Links / Interleaving	Access / Additional Higher Content	
4	Formulae and algebraic modelling Use symbols in practical contexts. L1: Substitute into mathematical and scientific formulae. L2: Rearrange simple one-step and two-step formulae. L3: Form expressions and equations from perimeter, area and money contexts. L4: Mixed formula work: substitute, rearrange and form equations from geometry and compound measures.	Fluency: Substitute positive values into familiar formulae. Apply: Rearrange simple formulae and solve contextual equations. Mastering: Multi-step rearrangement or simple simultaneous equations.	Vocabulary: formula, subject, substitute, rearrange, expression, model. Retrieve: formulae from geometry and compound measures.	Access: substitution boxes, flow diagrams, formula triangles where appropriate. Additional Higher Content: Multi-step rearrangement or simple simultaneous equations.	
5	Grade 4 bridge and cumulative problem solving Stretch without losing the core. L1: Linear graphs and equations: revisit gradient/intercept and intersections. L2: Quadratic tables and graphs; recognise roots as x-intercepts. L3: Mixed Foundation problem solving and method selection. L4: Cumulative Foundation problem solving with selected Grade 4 bridge questions and method selection.	Fluency: Plot tables accurately and consolidate linear algebra. Apply: Interpret intersections and simple quadratic graphs. Mastering: Simple simultaneous equations or factorise x^2+bx+c where secure.	Vocabulary: intersection, quadratic, curve, root, factor, solution. Retrieve: graphs, equations and factorising.	Access: pre-drawn axes, table scaffolds, extension offered only after core success. Additional Higher Content: Simple simultaneous equations or factorise x^2+bx+c where secure.	
Notes / Links / Interleaving: Retrieval is cumulative and selected from prior learning and assessment evidence.			Additional Higher Content: Deepen the same concept through explanation, proof, generalisation and unfamiliar problems.		

Summer 2 - 'Crime & Punishment'

Subject Area Topic: Algebra Consolidation and Grade 4 Bridge | Weeks 6-7 of 7

Length		7 weeks		Teaching time		28 lessons	
Assessment		Week 6 Assessment; Week 7 Misconceptions		Core purpose		Consolidate Foundation algebra and establish clear Year 11 priorities.	
Week	Subject Area Topic and Four Lessons		Fluency - Apply - Mastering		Notes / Links / Interleaving		Access / Additional Higher Content
6	ASSESSMENT WEEK L1: Guided cumulative revision using the year-long topic tracker. L2: HT6 assessment: cumulative Foundation-style paper assessing Year 10 readiness. L3: Teacher modelling of selected questions, pupil corrections and question-level analysis. L4: Complete targeted consolidation, set Year 11 priorities and correct one representative question from each weak strand.		Fluency: Essential Grade 1-2 security. Apply: Routine Grade 2-3 applications. Mastering: Selected Grade 4 pathway questions.		Vocabulary: Retrieve:		Access: Report outcomes by strand: Number, Algebra, Ratio, Geometry, Statistics/Probability. Additional Higher Content: Selected Grade 4 pathway questions.
7	MISCONCEPTIONS WEEK L1: Reteach highest-impact Number/Ratio gap from cumulative assessment. L2: Reteach highest-impact Algebra gap. L3: Reteach the highest-impact Geometry/Data gap from the cumulative assessment. L4: Complete the final recheck and produce a concise Year 11 handover record of strengths and priority gaps.		Fluency: Secure one reliable method. Apply: Transfer method to unfamiliar wording. Mastering: Explain, compare and generalise.		Vocabulary: Retrieve:		Access: End with a concise Year 11 handover record: strengths, persistent misconceptions and recommended starting targets. Additional Higher Content: Explain, compare and generalise.
Notes / Links / Interleaving: Retrieval is cumulative and selected from prior learning and assessment evidence.				Additional Higher Content: Deepen the same concept through explanation, proof, generalisation and unfamiliar problems.			