

Year	Half Term 1 Learning Overview	Half Term 2 Learning Overview	Half Term 3 Learning Overview	Half Term 4 Learning Overview	Half Term 5 Learning Overview	Half Term 6 Learning Overview
Year 7	<p>Application & reasoning with number: Place value & rounding Addition & subtraction</p> <p><i>Bowland: Counting Trees & Taxi Cabs</i></p>	<p>Application of multiplication & division <u>Geometric application of multiplication & division:</u> area</p> <p><i>Bowland: Youth Hostel & Speedy Santa</i></p>	<p>Fractional thinking: Four operations with fractions & mixed numbers. Manipulation of fractions <u>2D shape properties</u></p> <p><i>Bowland: Mobile Phones & Rods and Triangles</i></p>	<p>Application of geometry: Angles (inc. bearings) <u>Proportional reasoning:</u> Percentages</p> <p><i>Bowland: Ice Creams & 110 Years On</i></p>	<p>Representing data: Bar charts, pie charts, etc. Averages <u>Develop algebraic understanding:</u> expressions</p> <p><i>Bowland: Tuck Shop & Olympic Cycling</i></p>	<p>Develop algebraic understanding: Equations</p> <p><i>Revise, Assess, Improve</i></p> <p><i>Bowland: Hilbre Island & Lottery</i></p>
Year 8	<p><u>Algebraic manipulation:</u> Expansion of brackets, Factorisation, Change Subject <u>Working with patterns:</u> Sequences (all types)</p> <p><i>Bowland: Magic Sum Puzzle & Patchwork Cushions</i></p>	<p><u>Geometry in 2D:</u> Angle reasoning (AO2) & Loci 2D shape application; areas inc trapezia, circles & arcs</p> <p><i>Bowland: Bunting & Security Camera</i></p>	<p><u>Ratio & Proportion Reasoning:</u> Ratio (AO2 and AO3) Compound Units Direct & Inverse proportion</p> <p><i>Bowland: Smoothies & Candle Box</i></p>	<p><u>Ratio & Proportion Reasoning:</u> (continuation from HT3) <u>Working in 2D:</u> Reasoning with 2D geometry Understanding capacity</p> <p><i>Bowland: Day Out & Problem Page</i></p>	<p><u>Representing Information:</u> Listing strategies Graphs <u>Cartesian Plane:</u> Coordinates, linear, quadratic, cubic graphs</p> <p><i>Bowland: Z Factor & Hot Under the Collar</i></p>	<p><u>Constructions:</u> Bisectors <u>Further algebra:</u> Inequalities (solve) Simultaneous equations</p> <p><i>Bowland: Three of a Kind & Cats and Kittens</i></p>
Year 9	<p><u>Number systems:</u> FDP (FDP of amount to algebraic fractions) Estimation (rounding up to surds and Iteration) Types of numbers (primes up to negative fractional indices)</p>	<p><u>Compound Measures:</u> Use of formula <u>Transformations :</u> Describe and carry out Vectors</p>	<p><u>Application of shape & space:</u> Area (basic to frustrums) <u>Further algebraic manipulation:</u> (Substitution up to algebraic proofs) Displaying data (AO2/3)</p>	<p><u>Probability:</u> (basic probability to conditional probabilities – AO1-3) <u>Reasoning with angles:</u> (measuring to circle theorems) <u>Pythagoras & Trigonometry</u></p>	<p><u>Sequences:</u> (linear to quadratic) <u>Simultaneous equations:</u> (linear/linear AO2/3, linear/quadratic) <u>Graphs:</u> Linear & quadratic Transformation of graphs</p>	<p>Gap fill/Interleaving time</p>
Year 10	<p>F: Interleaving & Geometry AO1-2 H: Interleaving, Geometry and Number</p>	<p>F&H: Algebraic manipulation H: Ratio & Proportion</p>	<p>F: Geometry (AO2-3) & ratio and proportion H: Geometry (AO2-3)</p>	<p>F&H: Algebraic manipulation (AO1-3)</p>	<p>Gap fill/interleaving/revision for mocks</p>	<p>MOCKS Gap fill from QLA</p>
Year 11	<p>Number & Ratio and Proportion (June QLA topics)</p>	<p>Geometry & Shape (June QLA)</p>	<p>Algebraic manipulation (November QLA)</p>	<p>Handling data/statistics (November QLA)</p>	<p>EXAM REVISION</p>	
Year 12	<p>Pure – Year 11 to 12 bridge and extend > Proof and mathematical communication > Indices and surds > Quadratic functions > Polynomials > Using graphs <i>This half term is the bridging unit between GCSE and year 12. It builds on concepts that they have covered in year 11.</i></p>	<p>Pure > Logarithms > Exponential Models > Differentiation > Applications of differentiation > Integration > Revise > Assess > Gap fill</p>	<p>Pure > Coordinate geometry > Triangle geometry > Vectors > Trigonometric functions and equations</p>	<p>Pure & Statistics > Binomial expansion > Introduction to kinematics > Working with data > Probability > Statistical hypothesis testing</p>	<p>Statistics & Mechanics > Analysis of Data using Statistical Packages > Motion with constant acceleration > Forces and motion > Objects in contact</p>	<p>> Revise MOCK EXAMS > Individual student QLA following feedback from mock exam</p>
Year 13	<p>Pure > Functions > Further transformations of graphs > General binomial expansion > Sequence and series > Rational functions and partial fractions</p>	<p>Pure > Radian measure > Further Trigonometry > Calculus of exponential and trigonometric functions > Further differentiation > Further integration techniques</p>	<p>Pure > Further applications of calculus > Differential equations > Numerical solution of equations > Numerical integration > Application of vectors</p>	<p>Statistics & Mechanics > Projectiles > Forces in context > Conditional Probability > The normal distribution</p>	<p>Statistics & Mechanics > Further hypothesis testing > Revise > Gap fill</p>	