2A 2B/C	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic (s) **8A** **8B/C**	NUMBER 4 1 2 1 2	NUMBER 5 RATIO 2 5 6 3 4	NUMBER 6 ALGEBRA 2 3 7 5 8	NUMBER 7 ALGEBRA 3 4 8 6 7	GEOMETRY 3 9 10 9 10	GEOMETRY 4 STATISTICS 2 11 12 11 12
Topic Objectives	Develop 4 Operations with Integers Extend application of number to include prime factorisation including roots and rounding to significant figures	Develop Percentage Calculation and Percentage Change, Consolidate applications of Ratio and ratio of quantities Extend by calculating reverse percentages and repeated percentage change calculations. Link ratio to scale plans, maps rate and speed	Develop converting fractions and sums with fractions. Develop Algebra through Simplification, but extend Operations, include Evaluation of Expressions and look at Number Patterns Extend by factorising expressions and proof and finding the general term of a sequnce	Consolidate place value and calculations with decimals Consolidate and then extend to Linear Equations using brackets and fractions. Introduce Inequalities in one variable Work with Coordinates and Linear Functions Extend by forming linear equations to solve problems and calculating the gradient of a linear function	Consolidate and develop work with 2D Shape including Angles in Parallel Lines and work on Area and Perimeter. Extend by looking at angles in polygons	Develop work on 3D Surface Area and Volume Consolidate and develop work on data and graphs, introducing Stem and Leaf, Pie Charts and Scatter Graphs. Emphasis on working with grouped data Extend by looking at volume and surface area of further 3D shapes and the misuse of statistical graphs
Acquired Knowledge / Skills	• Negative integers • Integers and the four operations • HCF and LCM • Approximation and estimation (dp and sf)	• Percentage change • Reverse and repeated percentage change calculations	• Convert between FDP • Recap core terminology of algebraic manipulation	• Combined operations with fractions and decimals • Recap/introduce forming, rearranging and	• Angles on lines, points and in parallel lines • Angle and symmetry properties of polygons	• Work with grouped data • Draw and interpret pie charts

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		including brackets • Multiplicative notation • Factorisation • Patterns, sequences and general terms • Proof	solving linear equation in 1 variable. • Cartesian coordinates • Linear functions, graphs and grads • Inequality relationships and solving	• Perimeter/area: parallelograms, trapezia, comp shapes and circles • Conversion of square units	• Draw and interpret scatter graphs • Use graphs for analysis and prediction
Target Vocabulary	Estimate Approximate Factor Multiple Prime Significant Negative Scale Rate	Decimal multiplier Equivalent Reverse Original value Compound	Expand Expression Factorise Index Sequence Prove Proof	Solve Equation Variable Terms Axes / axis Function Linear Inequality	Parallel Vertically opposite Corresponding Alternate Trapezium Parallelogram Radius Diameter Circumference Symmetry Polygon	Frequency Correlation Line of best fit Analyse Predict
Assessment		**DECEMBER ASSESSMENT 4** 4 levels of assessment Crossover questions between each assessment		**APRIL ASSESSMENT 5** 4 levels of assessment Crossover questions between each assessment		**JULY ASSESSMENT 6** 4 levels of assessment Crossover questions between each assessment

Integer ratios, Scales and plans, Rate and speed calculations