

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Proportional Reasoning						Representations					
	Ratio and scale		Multiplicative change		Multiplying and dividing fractions		Working in the Cartesian plane		Representing data		Tables & Probability	
Spring	Algebraic techniques						Developing Number					
	Brackets, equations and inequalities				Sequences	Indices	Fractions and percentages		Standard index form	Number sense		
Summer	Developing Geometry						Reasoning with Data					
	Angles in parallel lines and polygons			Area of trapezia and circles		Line symmetry and reflection	The data handling cycle			Measures of location		

Autumn Half Term 1 – Proportional Reasoning		
Block 1 – Weeks 1 and 2	Block 2 – Weeks 3 and 4	Block 3– Weeks 5 and 6
Ratio and Scale <ul style="list-style-type: none"> Understand ratio and its link to multiplication Use ratio notation Reduce ratios to simplest form Solve ratio problems Calculate the circumference of a circle 	Multiplicative Change <ul style="list-style-type: none"> Use scale factors, linking to ratio, to solve simple direct proportion problems Convert between currencies, including using graphs Draw and interpret scale diagrams and maps 	Multiplying and dividing fractions <ul style="list-style-type: none"> Multiply and divide a fraction by an integer Multiply and divide a fraction by a fraction Understand and use the reciprocal
Notes/Links/Interleaving <ul style="list-style-type: none"> Revisit area Revisit equations Revisit converting improper fractions and mixed numbers Link to fractions of an amount 		Additional Higher Content <ul style="list-style-type: none"> Express any ratio in the form $1:n$ Explore direct proportion graphs Multiply and divide mixed numbers Multiply and divide simple algebraic fractions

Autumn Half Term 2 – Representation		
Block 4 – Weeks 7 to 9	Block 5 – Weeks 10 and 11	Block 6– Week 12
Working in the Cartesian plane <ul style="list-style-type: none"> Plot and interpret straight line graphs Understand and use the equations of a straight line, including lines parallel to the axes Make links between direct proportion and straight lines of the form $y = kx$ Model situations by translating them into expressions, formulae and graphs 	Representing data <ul style="list-style-type: none"> Draw and interpret scatter graphs Understand correlation Draw and use lines of best fit Understand grouped and ungrouped, discrete and continuous data Design and use one and two-way tables 	Probability <ul style="list-style-type: none"> List outcomes using sample space diagrams for one and two events Find probabilities using tables and Venn diagrams
Notes/Links/Interleaving <ul style="list-style-type: none"> Revisit calculation with directed number Link to solving one and two-step linear equations Revisiting Venn diagrams and set notation Links to representing data and using graphs in other areas of the curriculum 		Additional Higher Content <ul style="list-style-type: none"> Find the mid-point of a line segment Explore gradient Explore non-linear graphs Use the product rule for counting

Spring Half Term 1 – Algebraic Techniques		
Block 1 – Weeks 1 to 4	Block 2 – Week 5	Block 3 – Week 6
Brackets, equations and inequalities <ul style="list-style-type: none"> Expand, and factorise into, single brackets Form and use expressions, formulae and identities Form and solve equations and inequalities with and without brackets Distinguish between equations, expressions, formulae and identities 	Sequences <ul style="list-style-type: none"> Generate sequences using more complex rules, e.g. with brackets and squared terms, both in words and algebraically 	Indices <ul style="list-style-type: none"> Form expressions using indices Understand and use the addition and subtraction rules
Notes/Links/Interleaving <ul style="list-style-type: none"> Revisit the use of directed number Solve equations set in the context of earlier contexts – shapes, angles, probability, ratio etc. 	Additional Higher Content <ul style="list-style-type: none"> Expand a pair of binomials Solve equations and inequalities with unknowns on both sides Find the rule for the n^{th} term of a linear sequence Explore powers of powers 	

Spring Half Term 2 – Developing number		
Block 4 – Weeks 7 and 8	Block 5 – Weeks 9 and 10	Block 6 – Weeks 11 and 12
Fractions and percentages <ul style="list-style-type: none"> Develop understanding of fractions, decimals and percentages Evaluate percentage increases and decreases Use multipliers to solve percentage problems Express one number as a percentage of another 	Standard index form <ul style="list-style-type: none"> Convert between numbers in ordinary and standard form Compare numbers given in standard form Calculate with numbers given in standard form, with and without a calculator 	Number sense <ul style="list-style-type: none"> Develop mental strategies Convert between metric measures and units Estimation, including rounding to a given number of decimal places Use the order of operations
Notes/Links/Interleaving <ul style="list-style-type: none"> Revisit fraction, decimal and percentage equivalence Revisit formal methods for calculation, for integers and fractions Compare and use ratios in the context of FDP 	Additional Higher Content <ul style="list-style-type: none"> Finding the original given any percentage Understand and use surd notation Understand and use negative and simple fractional indices Convert between units of area and volume Use error interval notation 	

Summer Half Term 1 – Developing geometry		
Block 1 – Weeks 1 and 2	Block 2 – Weeks 3 and 4	Block 3– Weeks 5 and 6
Angles in parallel lines and polygons <ul style="list-style-type: none"> Review Y7 angles rules Understand and use parallel lines and angles Revisit geometric notation Work out angles in special quadrilaterals Find and use the sum of interior and exterior angles of a polygon Prove simple geometric facts 	Area of a trapezia and circles <ul style="list-style-type: none"> Review area of shapes covered in year 7 Calculate the area of a trapezium Calculate the area of a circle, and the area of parts of a circle Use significant figures Calculate the area of compound shapes 	Line symmetry and reflection <ul style="list-style-type: none"> Recognise line symmetry in polygons and other shapes Reflect shapes in horizontal, vertical and diagonal lines
Notes/Links/Interleaving <ul style="list-style-type: none"> Revisit forming and solving equations Revisit properties of shapes Revisit equations of straight lines 		Additional Higher Content <ul style="list-style-type: none"> Perform standard constructions including perpendiculars Understand and use the properties of diagonals of quadrilaterals

Summer Half Term 2 – Reasoning with data	
Block 4 – Weeks 7 to 10	Block 5 – Weeks 11 and 12
The data handling cycle <ul style="list-style-type: none"> Understand and use primary and secondary sources of data Collect data, including using questionnaires Interpret and construct statistical diagrams, including multiple bar charts Construct and interpret pie charts Compare distributions using charts Identify misleading graphs 	Measures of location and dispersion <ul style="list-style-type: none"> Revisit the median and mean, including finding the total given the mean Find the mean of grouped data Work out the mode and modal class Choose the appropriate average Comparing distributions using measures
Notes/Links/Interleaving <ul style="list-style-type: none"> Revisit finding the range Use algebraic substitution to form lists for averages and the range Links to data collection and representation in other areas of the curriculum 	Additional Higher Content <ul style="list-style-type: none"> Find unknown data values given the mean or changes in the mean Explore histograms for unequal groups Find the median from a table of values