

Year 8

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Number	Algebraic expressions	2-D geometry	Proportional reasoning	3-D geometry	Statistics

*All should be confident and competent with Year 7 material. Review of these prerequisites may be useful for each unit:*

Factors, multiples and primes Multiplication and division Fraction equivalence and calculations	Problem solving with fractions Order of operations Form algebraic expressions Substitution	Angle types Angle facts Rectangle and triangle areas $\times/\div$ by powers of 10 Problem solving with negative numbers	Rounding Bar modelling with fractions Fraction $\times/\div$ Bar modelling with equations FDP equivalence	Rectilinear areas Fraction $+/-$ Problem solving with fractions Percentage increase and decrease Substitution with negatives	Statistical diagrams Ratio and rate The mean Calculator skills and rounding
---	---	--	---	--	--

*All will have access to this specific Key Stage 3 content:*

Primes and indices Prime factorisation to find LCM, HCF, squares, Venn diagrams Enumerating sets Add and subtract fractions	Negative numbers and inequality statements Formulate and evaluate expressions Linear equations Expressions and equations from realworld situations Linear sequences: nth term	Draw accurate triangles and quadrilaterals Find unknown angles (including parallel lines) Conversion between length units Areas and perimeters of composite shapes Areas of parallelograms and trapeziums	Convert between percentages, vulgar fractions and decimals Percentage increase and decrease Ratio (equivalent, of a quantity) and rates Speed, distance, time	Rounding, significant figures and error Circumference and area of a circle Visualise and identify 3-D shapes and solids Volume of cuboid, prism, cylinder, cone and sphere	Collect and organise data Interpret and compare statistical representations Mean, median and mode averages The range and outliers
---	---	---	--	---	--

*As well as looking at the termly projects, highest attaining students may be stretched through depth by consideration of the following:*

Egyptian fractions Continued fractions HCF and LCM generalisation	Explore non-linear sequences T-totals	Similarity and ratio Complex constructions Simple angle proofs	Density Area scale factors Loan repayment	Platonic solids Percentage errors Plans and elevations	Misleading graphs Equal width histograms Sampling methods
---	--	--	---	--	---