

Year 7

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Solve word problems (add and subtract)	Explain and investigate (multiply and divide)	Geometry	Fractions	Applications of algebra	Percentages and statistics

All should be confident and competent in Key Stage 2 material. Review of these prerequisites may be useful for each unit:

Number bonds Convert units Money +/- Measurement	Mental strategies Multiplication facts Multiplication strategies Solve number problems	Lengths and units Parallel and perpendicular Work with angles Division and the mean	Equal parts Factors and multiples Tenths and hundredths Word problems Fractional areas	Areas of rectangles and triangles Number patterns Algebraic notation Triangle and quadrilateral properties	Decimals and problem solving Fractions of shapes Equivalence Order of operations
---	---	--	--	---	---

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

Place value (including decimals) Add and subtract (including decimals) Estimation Perimeter Word problems	Factors, HCF, multiples, LCM Multiply and divide (including decimals) Area of rectangle and triangle Calculate the mean	Draw, measure and name acute angles Find unknown angles (straight line) Properties of triangles and quadrilaterals	Equivalent fractions Compare and order fractions and decimals Change mixed numbers to improper fractions Fraction of a quantity Multiply and divide fractions	Order of operations Substitution Simplify algebraic expressions Solve word problems with expressions Sequences (term-to-term, not nth term)	Construct and interpret statistical diagrams including pie charts Convert between percentages, vulgar fractions and decimals Percentage of a quantity Find the whole, given the part and the percentage
---	--	--	---	---	--

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

Different counting systems or bases Generalisation <a href="http://math4teaching.com/2011/">http://math4teaching.com/2011/</a> Upper and lower bounds	Shikaku puzzles Different counting systems or bases Alternative methods of multiplication Generalisation	Tessellating triangles and quadrilaterals Tangram investigations Rigid shapes	Terminating and recurring decimals Fractions of tangrams Shape block challenges	Four fours <a href="http://mathforum.org/">http://mathforum.org/</a> Patterns and generalising Algebraic mean questions	Comparing and converting between representations Applications of percentages
---	---	---	---	---	---