

Year 8 Unit 4 21 Lessons

Aims: Develop students' skills of manipulating algebraic expressions to include rearranging formulae and solving equations. Applying prior knowledge to real life contexts.

Key Skills	Literacy Links:	Numeracy Links:
 Excellence - Rearranging complex formulae. Interpreting the gradient of real life graphs and motion graphs. Recognising when lines and parallel or perpendicular. Deriving the equation of a straight line. Secure - Recognising fluctuations and trend in time series data. Solving equations involving brackets. Creating and solving equations from a variety of contexts including problems from geometry. Developing - Rearranging simple formulae. Writing a formula from a given context. Completing a table of values and drawing a straight line graph. Finding the gradient of a straight line. Solving equations using trial and improvement. Emerging - Expanding a single bracket. Factorising a simple expression. Reading information from real-life graphs including motion graphs. Plotting a time series graph. Forming a simple equation. 	Keywords: Formula, formulae, parallel, perpendicular, equation, gradient, trend, factor, factorising.	Embedded throughout.
Assessment	Cross-Curricular Links	
Pre-test at the beginning of the unit to establish prior learning, post-test at the end of the unit to determine	Kinematics from science – graphs that describe motion. Understanding that gradient represents a rate of change – relevant for science, geography, design and other subjects.	
progress.	SMSC opportunities and British values	
Opportunities for further learning		

Mymaths sections on Algebraic manipulation, expressions and formulae, equations linear (and equations quadratic as extension), graphs all from the ALGEBRA category.