



# Curriculum Summary Document

## Year 7 Mathematics

Module/Unit of Learning	Term Taught	What will students learn?	What does this prepare students for?	Links to other subjects
Using place value and the properties of numbers.	Autumn	Powers, roots, prime factors, standard form.	The laws of indices.	Science: Mass of big/small objects
Understanding and using algebraic notation.	Autumn	Functions, substitution, simplifying expressions.	Formula and function notation	Science
Investigating right-angle triangles.	Autumn	An introduction to Pythagoras' Theorem	3D Pythagoras	
Spotting the patterns in sequences.	Autumn	Position to term rules for linear sequences.	Plotting graphs	
To be able to calculate using fractions and to understand the equivalence of fractions, decimals and percentages.	Autumn	All four operations with fractions. Introduction to algebraic fractions.	Simplifying algebraic fractions.	
Problem solving with addition and subtraction.	Spring	Bank statements, frequency trees, perimeter.	Probability tree diagrams.	
Four operators with directed numbers.	Spring	Solving problems involving negative numbers	Substituting negative numbers in to algebraic expressions.	Science Geography
Solving problems with multiplication and division.	Spring	Divisibility rules, area, factors, multiples	Factorising algebraic expressions.	
To calculate using ratio and scale.	Spring	Sharing in a given ratio, calculating parts of ratios, pie charts	Direct and inverse proportion equations and graphs	Science, Geography
Constructing, measuring and using geometric notation.	Summer	Use compass or protractor and ruler to accurately draw triangles	Loci involving angle and line bisectors.	Art
Developing geometric reasoning.	Summer	Angle rules inc. polygons and parallel lines	Geometric proofs and circle theorems	Art
To understand why we estimate.	Summer	Rounding to significant figures and estimating	Upper and Lower bounds	Science