

Maths Year 8 High Curriculum Map



**Notre Dame
Catholic College**

YEAR 7	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Curriculum Content	<p>Composite Number N1 Multiplying decimals N1 Dividing decimals N4 Adding and subtracting fractions N4 Working with mixed numbers N4 Dividing fractions</p> <p>Composite Algebra A1 Setting up and solving simple equations A1 Using brackets</p> <p>Composite Statistics and Probability SP2 Scatter diagrams</p> <p>Composite Geometry and Measure GM4 Constructions with a pair of compasses GM6 Understanding nets</p>	<p>Composite Number N6 Ratio</p> <p>Composite Algebra A3 Plotting graphs of linear functions A1 Working with more complex equations A1 Solving equations with brackets</p> <p>Composite Geometry and Measure GM1 Bearings GM1 Scale drawing</p> <p>Composite Statistics and Probability SP4 Probability</p>	<p>Composite Geometry and Measure GM1 Metric-imperial conversions GM5 Enlargement</p> <p>Composite Number N7 Index notation</p> <p>Composite Algebra A2 Sequences</p> <p>Composite Geometry and Measure GM6 Volume and surface area of cuboids</p>	<p>Composite Statistics and Probability SP3 Collecting data SP1 Frequency Tables SP2 Displaying grouped data</p> <p>Composite Number N5 Applying percentage increases and decreases to amounts</p> <p>Composite Geometry and Measure GM6 2D representations of 3D shapes</p>	<p>Composite Algebra A3 Functions and graphs</p> <p>Composite Geometry and Measure GM3 Circles</p> <p>Composite Number N2 Writing numbers in standard form</p>	<p>Composite Number N5 Percentages</p> <p>Composite Algebra A1 Simplifying Expressions</p> <p>Composite Geometry and Measure GM3 Pythagoras' theorem</p>
Prior knowledge and skills (from previous year / key stage)	<p>Knowledge and understanding of place value, equivalent fractions, multiplying fractions and BIDMAS. Knowledge and understanding of algebraic notation, co-ordinates in 2 dimensional space and properties of 2 dimensional and 3 dimensional shapes.</p>	<p>Knowledge and understanding of co-ordinates in 2 dimensional space, solving simple equations, use of brackets in algebraic settings. Scale drawing will draw on the knowledge of ratio taught earlier in term. Awareness of compass directions.</p>	<p>Knowledge and understanding of metric units, co-ordinates in 2-dimensional space and substitution. Depth of understanding of area of 2D shapes. Awareness of indices.</p>	<p>Knowledge and understanding of collecting data, displaying data in charts, percentage of an amount, understanding properties of 3D shapes. Awareness of the meaning of 2 dimensional.</p>	<p>Knowledge and understanding of substitution, co-ordinates, area, place value and indices.</p>	<p>Knowledge and understanding of percentage increase and decrease, simplifying simple expressions, squares and square roots.</p>
Core Knowledge Organiser content	<p>Definitions of keywords, formulae and concepts met within decimals, fractions, equations, understanding nets with accompanying MathsWatch clips, to support independent learning.</p>	<p>Definitions of keywords, formulae and concepts met within ratio, proportion, linear functions, BIDMAS and circles with accompanying MathsWatch clips, to support independent learning.</p>	<p>Definitions of keywords, formulae and concepts met within metric and imperial unit conversions, transformations, sequences, volume and surface area with accompanying MathsWatch clips, to support independent learning.</p>	<p>Definitions of keywords and concepts met within collecting and representing data, percentages, and 2D and 3D shapes.</p>	<p>Definitions of keywords formula and concepts met within linear graphs, area of a circle and writing numbers in standard form.</p>	<p>Definitions of keywords formula and concepts met within percentages, simplifying expressions and Pythagoras's theorem.</p>

Assessment Objectives	To be able to demonstrate multiplying and dividing decimals, adding and subtracting fractions and solving equations. Show and demonstrate accuracy of constructing triangles using compasses and plotting and interpreting scatter diagrams.	To be able to work confidently with ratio and proportion, solving more complex equations, bearings, circumference, scale drawing and combined probability event.	To be able to confidently convert between metric and imperial units, demonstrate use of index notation, volume and surface area of cuboids and sequences.	To show understanding of collecting and representing data, percentages, and 2D and 3D shapes.	To show understanding of equation of a linear graph, numbers written in standard form, grouped data and area of a circle.	To be able to demonstrate percentage change from one amount to another, simplifying expressions involving powers greater than two,
Vocabulary / Key Subject Terminology	Decimal, fraction, improper fraction, mixed number, 2D, 3D, equations.	Ratio, proportion, equation, linear, bearing, north, south, east, west, circumference, expand, probability.	Sequence, term, nth term, term-to-term rule, volume, area, surface area, enlarge, scale factor, metric, imperial.	Questionnaire, frequency, percentage, increase, decrease, 2 dimensional and 3 dimensional.	Circle, radius, diameter, circumference, linear, y-intercept, gradient, index.	Percentage, increase, decrease, reverse, sale, profit, terms, simplify, hypotenuse, right-angled triangle.
Assessment 1	<u>BAM: Reviewing Skills Assessment</u> - Topic based assessments using review N1.8, N1.9.	<u>BAM: Reviewing Skills Assessment</u> - Topic based assessments using review A1.7 and A1.8 plus additional exam style question.	<u>BAM: Reviewing Skills Assessment</u> - Topic based assessments using review N7.4 plus additional exam style question.	<u>BAM: Reviewing Skills Assessment</u> - Topic based assessments using review SP3.2 and SP2.5 plus additional exam style questions	<u>BAM: Reviewing Skills Assessment</u> - Topic based assessments using review A3.3 plus additional exam style question.	<u>BAM: Reviewing Skills Assessment</u> - Topic based assessments using review N5.5 and N5.6 plus additional exam style question.
Assessment 2	<u>BAM: Reviewing Skills Assessment</u> - Topic based assessments using review SP2.6 plus additional exam style question.	<u>Christmas Assessment:</u> full synoptic assessment.	<u>BAM: Reviewing Skills Assessment</u> - Topic based assessments using review GM 6.3 plus additional exam style question.	<u>Easter Assessment:</u> full synoptic assessment	<u>BAM: Reviewing Skills Assessment</u> - Topic based assessments using review GM3.4 plus additional exam style question.	<u>Summer Assessment:</u> full synoptic assessment
Cross Curricular Links with other Faculties	Multiplying and Dividing decimals – Money Skills. Scatter diagrams – Science and Geography.	Ratio and Proportion – Food Technology Bearing – Geography	Index Notation – Science	Displaying Data – Science and Geography Percentages – Business 2D representations of 3D shapes - Art	Standard form – Science Displaying grouped data – science, geography, business	Percentages – Business
Extra-Curricular Offer	KS3 UKMT Problem Solving Club “Problem of the week”	KS3 UKMT Problem Solving Club “Problem of the week”	KS3 UKMT Problem Solving Club “Problem of the week”	KS3 UKMT Problem Solving Club “Problem of the week”	KS3 UKMT Problem Solving Club “Problem of the week”	KS3 UKMT Problem Solving Club “Problem of the week”
Time Allocation	7 weeks 4 lessons per week	7 weeks 4 lessons per week	6 weeks 4 lessons per week	5 weeks 4 lessons per week	6 weeks 4 lessons per week	7 weeks 4 lessons per week

