



Lymm High School- KS3 Life after levels - Maths Y7

		BRONZE	SILVER	GOLD	PLATINUM
		D and below= GCSE 1,2,3	C= GCSE 4	C/B= GCSE 5,6	A/A*= GCSE 7,8,9
Year 7	Number, Ratio & Proportion	Illustrate Fractions, Decimals and Percentages in diagrams and other contexts Identify / Simplify Ratio Add, Subtract and Multiply, and Divide Integers Round to nearest 10, 100, 1000 etc	BIDMAS Basic Fraction, Decimal and Percentage Conversions Types of Number (Squares, Cubes, Roots etc.) Round to decimal places and nearest integer Basic estimation Find fractions of amounts Simplify / find equivalent fractions Write a number as a % of another Calculate percentages (Calc/non calc) 4 operations with decimals Recognise certain recurring decimals (eg $1/3 = 0.33333\dots$ etc) Divide into a ratio Calculate simple percentage increase and decrease.	Fractions, Decimals and Percentages involving calculations 4 operations with negative numbers Write number as a product of prime factors Find HCF and LCM by listing. Round numbers to a given number of significant figures Order Fractions 4 operations with fractions Percentage increase and decrease using multipliers Find the Reciprocal Convert currencies Apply Unitary method (Recipes, Direct proportion etc) Best buy Find and use nth term of a linear sequence Use nth term of a simple quadratic sequence Plot and read conversion graphs	Estimate calculations using sig figs 4 Operations with mixed numbers Percentage change Reverse percentages Recurring decimals to fractions (Using algebra) Convert ordinary to standard form Find nth term of a quadratic sequence Use Prime Factors to find HCF and LCM of 2 or 3 numbers



Lymm High School- KS3 Life after levels - Maths Y7

<p>Algebra</p>	<p>Plot coordinates all 4 quadrants Generate sequence given term to term ruler</p>	<p>Simplifying expressions by multiplying and collecting like terms Writing Expressions Solve linear (basic) vertical / horizontal / $y=x$ lines Plot Straight line graphs from table of values Recognise Fibonacci / triangular numbers</p>	<p>Expand brackets Expand and simplify brackets Factorise expressions Change subject of a formula is simple cases Substitute in positive integers into expressions and formulae Solve linear equations with fractional/negative solutions Apply Index Laws</p>	<p>Expand double brackets Solve linear equations with the unknown on both sides Derive formulae and substitute negative and fractions into a formula Apply trickier Index laws including simple fractional or negative powers Understand $y=mx+c$ Find gradient of parallel lines</p>
	<p>Probability & Statistics</p>	<p>Draw / Read bar charts and pictograms Know and use the probability scale</p>	<p>Calculate probabilities 4 averages discrete data Understand types of data scatter graphs (plot and interpret)</p>	<p>Listing Outcomes and use to Calculate Probabilities Know that the probabilities of all mutually exclusive events add up to 1 Relative frequency Expected frequencies Calculate 3 averages and range from a frequency table Choose appropriate average Draw / Read pie charts Draw, Complete and use two-way tables Describe strength and type of correlation</p>



Lymm High School- KS3 Life after levels - Maths Y7

				Draw Lines of best fit and use to estimate values	
	Geometry & Measures	<p>Types and properties of shapes</p> <p>Tessellations</p> <p>Identify types of triangles and quadrilaterals</p> <p>Identify Faces, Edges, Vertices on 3D shapes</p> <p>Draw and Identify nets of 3D shapes</p> <p>Identify lines of symmetry and order of rotational symmetry</p> <p>Basic reflections with line of reflection</p> <p>Perimeter and area of Rectangles</p> <p>Use a ruler, protractor and compass correctly</p> <p>Know the different types of angles.</p>	<p>Apply Angle properties (line, point, triangle, quadrilateral, etc)</p> <p>Find perimeter and area of Triangles and Parallelograms</p> <p>Find Volume of Cubes and Cuboids</p> <p>Convert units of length/mass/capacity</p> <p>Isometric drawings</p> <p>Simple Rotation (draw & des)</p> <p>Translation (draw & des)</p> <p>Positive Enlargement without point</p>	<p>Find angles in parallel lines, giving reasons</p> <p>Angles in polygons (Exterior and Interior)</p> <p>Construct ASA/SAS/SSS triangles</p> <p>Construct Perpendicular bisector (inc. from point)</p> <p>Construct Angle bisector</p> <p>Find the area of a Trapezium (using formula)</p> <p>Find area of Compound shapes</p> <p>Find area and circumference of Circles</p> <p>Calculate Volume of Triangular Prisms</p> <p>Calculate Volume of Composite Prisms</p> <p>Convert metric to imperial units</p> <p>Find surface area of cubes / cuboids</p> <p>SA Triangular Prisms</p> <p>Plans and elevations</p> <p>Reflection in horizontal and vertical lines(draw & des)</p>	<p>Construct 60, 30, 45 degrees using Ruler and Compasses</p> <p>Find the volume of a Cylinder</p> <p>Convert units of area and volume</p> <p>Find surface area of a Cylinder</p> <p>Calculate Density, Acceleration and Pressure</p> <p>Construct Loci</p> <p>Describe regions with a combination of Loci</p>



Lymm High School- KS3 Life after levels - Maths Y7

				Reflection in lines $y=x$ and $y=-x$ (draw & des) Positive Enlargement about a point (draw & des) Rotation about a point in the x-y plane (draw and des) Calculate speed Plot and read distance time graphs Use and interpret maps and scale drawings Understand and use bearings	
--	--	--	--	---	--