

S1 Block 1 – Upper and Middle Course – First term plus first 3 weeks of second term.

Topic	EO	Content	Suggested Resource	Time (hours)
NMM – Rounding	MNU 3-01a I can round a number using an appropriate degree of accuracy, having taken into account the context of the problem.	<ul style="list-style-type: none"> ○ Decimal places, ○ Significant Figures, ○ Estimating using sig figs 	Teejay 3a Pages 7-12 L&L P11-15 (not Sig Figs)	3
<p>Extension:</p> <p>Consolidation: Mini Murder 18 Approximating and Rounding from Mini Mathematical Murder Mysteries 18 (in KR base) Rounding to dp codebreaker (lesson starter) Computer based sig figs activity (10-20 minutes)</p> <p>Rich Tasks: Standards Units Rounding activity that is easily adapted to decimal places and significant figures (30 minutes +)</p>				
NMM – Whole Numbers	MNU 3-03a I can use a variety of methods to solve number problems in familiar contexts, clearly communicating my processes and solutions.	<ul style="list-style-type: none"> ○ Problems involving + - x /. ○ Multiply and divide by multiples of 10, 100 etc. ○ Order of operations 	Teejay 3a Pages 13-20 L&L P16-30 selection	5
<p>Extension:</p> <p>Consolidation:</p> <p>Rich Tasks:</p>				
NNM – Integers	MNU 3-04a I can use my understanding of numbers less than zero to solve simple problems in context.	<ul style="list-style-type: none"> ○ Negative numbers in context. ○ Adding and subtracting integers. ○ Multiplying and dividing integers 	Teejay 3a Pages 32-39 L&L P49-50	5
<p>Extension:</p> <p>Consolidation:</p> <p>Rich Tasks: https://rich.maths.org/9941 The balloon game (+/- negative numbers) http://rich.maths.org/5864 Playing connect 3 (+/- negative numbers)</p>				
NMM – Algebra 1	MTH 3-14a I can collect like algebraic terms, simplify expressions and evaluate using substitution. MTH 3-15a	<ul style="list-style-type: none"> ○ Simplify Expressions. ○ Expand brackets and simplify. ○ Solve equations up to $3(x+2) = 20$. ○ Evaluate simple formulae. 	Teejay 3a Pages 54-64 L&L P165-198 selection	8

	Having discussed ways to express problems or statements using mathematical language, I can construct, and use appropriate methods to solve, a range of simple equations.	<ul style="list-style-type: none"> ○ Construct and evaluate a formula. 	(more algebra in block 3)	
Extension:				
Consolidation:				
Rich Tasks:				
SPM – Angles and triangles	MTH 3-17a I can name angles and find their sizes using my knowledge of the properties of a range of 2D shapes and the angle properties associated with intersecting and parallel lines.	<ul style="list-style-type: none"> ○ Complementary and supplementary. ○ Angle around a point. ○ Vertically opposite angles. ○ Angles in a triangle. 	Teejay 3a Pages 23-30 L&L 207-222	4
Extension:				
Consolidation:				
Rich Tasks:				
SPM Coordinates	MTH 3-18a I can use my knowledge of the co-ordinate system to plot and describe the location of a point on a grid.	<ul style="list-style-type: none"> ○ 4 quadrants 	Teejay 3a Page 41-44 L&L 248-253	2
Extension:				
Consolidation:				
Rich Tasks:				
Enrichment/consolidation activities				3
Block Assessment (Week 3 after October Holidays).				3
Total Time				33

S1 Block 2 – Upper and Middle Course – Weeks 4-8 of term 2 plus Weeks 1-6 of term 3

Topic	EO	Content	Suggested Resource	Time (hours)
NMM Fractions	MNU 3-07a MTH 3-07b MTH 3-07c I can solve problems by carrying out calculations with a wide range of fractions, decimal fractions and percentages, using my answers to make comparisons and informed choices for real-life situations. By applying my knowledge of equivalent fractions and common multiples, I can add and subtract commonly used fractions. I can convert between whole or mixed numbers and fractions.	<ul style="list-style-type: none"> ○ Equivalence and Simplifying. ○ Converting mixed to top heavy fractions and vice versa. ○ Adding and subtracting fractions with the same and different denominators. 	Teejay 3a Pages 78-87 L&L P81-90	4
Extension: Fraction magic squares Consolidation: Subtracting fractions (conceptual) , Match three (equivalence) , adding fractions (starter) , improper fractions code breaker Rich Tasks: Fractions to Percentages				
SPM 2D Shape – Quadrilaterals- Area and Perimeter	MTH 3-16a Having explored a range of 3D objects and 2D shapes, I can use mathematical language to describe their properties, and through investigation can discuss where and why particular shapes are used in the environment.	<ul style="list-style-type: none"> ○ Area and perimeters of squares, rectangles and triangles. ○ Composite areas of squares, rectangles and triangles. 	Teejay 3a Pages 67-76 L&L 126-144	3
Extension: Area of rhombus, kite, parallelogram and trapezium. Guillotine Consolidation: Area and perimeter consolidation starter activity Area and perimeter matching activity Rich Tasks:				
SPM 2D Shape - Circle	MNU 4-16b , MTH 3-11b Having investigated the relationship between the radius, diameter, circumference and area of a circle I can apply my knowledge to solve related problems.	<ul style="list-style-type: none"> ○ Circumference of a Circle. ○ Area of a circle. ○ Including fractions of a circle (half and quarter). 	Teejay 3a Pages 88-94 Pages 125-130 L&L 126-151 (selection) L&L Bk4 228-237	8
Applet demonstrating link between diameter and circumference Extension: Finding diameter from circumference. Finding radius from the area. Penny farthing , Eight circles , Arc length, Sector area. Consolidation: Mixed circle questions , Compound area questions (page 7 Q12-15)				

Rich Tasks:				
NMM Percentages	MNU 3-07a I can solve problems by carrying out calculations with a wide range of fractions, decimal fractions and percentages, using my answers to make comparisons and informed choices for real-life situations.	<ul style="list-style-type: none"> ○ Percentages without a calculator. ○ Percentages with a calculator. ○ Linking decimals, fractions and percentages. 	Teejay 3a pages 46-53 L&L 73-79	5
Extension: Decimal multipliers (increase/decrease calculator questions)				
Consolidation: FDP matching activity , percentage of an amount non-calc starter , non-calc percentages code breaker				
Rich Tasks: 40% of 70 = 70% of 40 inquiry lesson				
SPM 3D Shape Volume	MNU 3-11a I can solve practical problems by applying my knowledge of measure, choosing the appropriate units and degree of accuracy for the task and using a formula to calculate area or volume when required. MTH 3-11b Having investigated different routes to a solution, I can find the area of compound 2D shapes and the volume of compound 3D objects, applying my knowledge to solve practical problems.	<ul style="list-style-type: none"> ○ Volumes of cubes and cuboids including composites. ○ Capacity. 	Teejay 3a Pages 104-111 L&L 138-151 selection	3
Extension: Volume of a triangular prism, surface area				
Consolidation:				
Rich Tasks: corn flake box (includes surface area)				
Enrichment/consolidation activities				6
Block Assessment (5th week after Christmas Holidays).				3
Total Time				33

S1 Block 3 – Upper and Middle Course – Weeks 7-12 of term 3 plus Weeks 1-6 of term 4

Topic	EO	Content	Suggested Resource Teejay 3b	Time (hours)
NMM Factors, Multiples and Primes	MTH 3-05a I have investigated strategies for identifying common multiples and common factors, explaining my ideas to others, and can apply my understanding to solve related problems.	<ul style="list-style-type: none"> ○ Multiples and Lowest Common Multiple. ○ Factors and Highest Common Factor. ○ Prime numbers. 	Pages 26-33 L&L 50-59	4
Extension: Prime decomposition				
Consolidation:				
Rich Tasks:				
NMM Powers and Roots	MNU 3-08a Having explored the notation and vocabulary associated with whole number powers and the advantages of writing numbers in this form, I can evaluate powers of whole numbers mentally or using technology.	<ul style="list-style-type: none"> ○ Squares, cubes and powers. ○ Square and cube roots. 	Pages 8-11 L&L 60-63	3
Extension:				
Consolidation:				
Rich Tasks:				
Information handling	MNU 3-20a MTH 3-20b MTH 3-21a I can work collaboratively, making appropriate use of technology, to source information presented in a range of ways, interpret what it conveys and discuss whether I believe the information to be robust, vague or misleading. When analysing information ... Click on link for full E&O	<ul style="list-style-type: none"> ○ Bar graphs and line graphs (revision). ○ Stem and Leaf Diagrams. 	Pages 118-135 L&L 254 – 263	3
Extension: Spreadsheets, Bias in data collection				
Consolidation:				
Rich Tasks:				
SPM – Angles and triangles	MTH 3-17a I can name angles and find their sizes using my knowledge of the properties of a range of 2D shapes and the angle properties associated with intersecting and parallel lines.	<ul style="list-style-type: none"> ○ Corresponding Angles ○ Alternate angles ○ Problems involving all angles 	Pages 56-63 L&L 213-215	4
Extension:				
Consolidation:				

Rich Tasks:				
NMM Fractions 2	MNU 3-07a MNU3-08a MNU 3-09a As term 2	<ul style="list-style-type: none"> ○ Multiplying fractions including mixed numbers. ○ Dividing fractions including mixed numbers. ○ Mixed problems with all 4 operations. 	Pages 75-80 L&L 65-68 (no division)	3
Extension:				
Consolidation:				
Rich Tasks:				
NMM Algebra 2	MTH 3-15a Having discussed ways to express problems or statements using mathematical language, I can construct, and use appropriate methods to solve, a range of simple equations.	<ul style="list-style-type: none"> ○ Revise basic equations up to $3x - 4 = 11$. ○ Equations with letters both sides or brackets. 	pages 46-54 L&L P177-187	6
Extension: Solving inequalities. Equations with letters both sides and brackets. Equations with fractions.				
Consolidation:				
Rich Tasks:				
SPM Bearings and Scale Drawings	MTH 3-17b MTH 3-17c Having investigated navigation in the world, I can apply my understanding of bearings and scale to interpret maps and plans and create accurate plans, and scale drawings of routes and journeys. I can apply my understanding of scale when enlarging or reducing pictures and shapes, using different methods, including technology.	<ul style="list-style-type: none"> ○ Enlargement/reduction. ○ Using scale drawings to calculate lengths. ○ Making basic scale drawings. 	pages 82-94 L&L 226-247 (selection)	4
Extension: Scale drawings with a protractor, scale drawings with a protractor.				
Consolidation:				
Rich Tasks:				
Enrichment/consolidation activities				6
Block Assessment (5th or 6th week after Easter Holidays).				3
Total Time				36