Australian Signpost Maths NSW Stage 3 (Year 6) Syllabus Map

Strand	Substrand	New NSW Outcome	New Content Description	Australian Signpost Maths NSW Lessons
Number and Algebra	Represents Numbers B	**MA3-RN-01:** applies an understanding of place value and the role of zero to represent the properties of numbers	Whole numbers: Locate and represent integers on a number line	1:01 Large numbers 1:02 Place value using powers of 10 1:07 Negative numbers 1:08 Positive and negative numbers 1:09 Order integers 1:10 Using integers 1:11 Using negative numbers
		MA3-RN-02: compares and orders decimals up to 3 decimal places	Decimals and percentages: Make connections between benchmark fractions, decimals and percentages	1:03 Percentages 1:04 Percentages 2:23 Adding decimals 2:24 Adding thousandths 2:35 Division of decimals 3:01 Centimetres and millimetres 3:02 Kilometres 3:19 Tonnes 2:48 Problem solving with decimals 3:23 Timetables
		MA3-RN-03: determines percentages of quantities, and finds equivalent fractions and decimals for benchmark percentage values	Decimals and percentages: Determine percentage discounts of 10%, 25% and 50%	1:03 Percentages 1:04 Percentages 1:23 Finding percentages 1:24 Finding percentages 2:48 Problem solving with decimals
Number and Algebra	Additive Relations B	**MA3-AR-01:** selects and applies appropriate strategies to solve addition and subtraction problems	Choose and use efficient strategies to solve addition and subtraction problems	1:25 Addition of fractions 1:26 Subtraction of fractions 2:03 Addition review 2:04 Subtraction review 2:05 Strategies for subtraction 2:13 Problem solving 2:18 Addition of large numbers 2:19 Subtraction of large numbers 2:20 5-digit subtraction from 10 000s 2:21 Travel maths 2:22 Money 2:38 Using rounding 3:20 Units of mass 2:55 Problem solving 2:56 Problem solving
			Applies known strategies to add and subtract decimals	2:23 Adding decimals 2:24 Adding thousandths 2:25 Adding decimals 2:26 Subtraction of decimals 2:27 Estimating with decimals 2:39 Estimation with decimals 2:48 Problem solving with decimals
Number and Algebra	Multiplicative Relations B	**MA3-MR-01:** selects and applies appropriate strategies to solve multiplication and division problems	Select and apply strategies to solve problems involving multiplication and division with whole numbers	2:01 Multiplication review 2:02 Division review 2:10 Multiplying 10s, 100s, 1000s 2:11 Multiplication of larger numbers 2:12 Multiplying thousands 2:13 Problem solving 2:14 Division review 2:15 Division 2:16 Division involving fractions 2:17 Averages 2:21 Travel maths 2:31 Division of thousands 2:32 Division with zero in the answer 2:33 Division of large numbers by 10 2:37 Strategy for division 2:39 Using rounding 2:41 Multiplying by a multiple of 10

				2:42 Multiplication of 2-digit numbers 2:43-4 Multiplication by 2-digit numbers 2:51 Divisibility and factors 2:55-6 Problem solving
			Multiply and divide decimals by powers of 10	2:28-30 Multiplication of decimals 2:34 × and ÷ by powers of 10 2:35-6 Division of decimals 2:39 Estimation with decimals 2:45 × decimals by 2-digit numbers 3:20 Units of mass
			Represent and describe number patterns formed by multiples	1:06 Patterns 2:08 Square numbers 2:09 Square numbers 2:49 Prime and composite numbers 2:50 Primes and composites 2:52-4 Algebraic thinking
		MA3-MR-02: constructs and completes number sentences involving multiplicative relations, applying the order of operations to calculations	Use equivalent number sentences involving multiplication and division to find unknown quantities	2:21 Travel maths 2:31 Division of thousands 2:41 Multiplying by a multiple of 10 2:43 Multiplication by 2-digit numbers 3:20 Units of mass 2:45 × decimals by 2-digit numbers 2:55-6 Problem solving
			Explore the use of brackets and the order of operations to write number sentences	2:06-7 Order of operations 2:40 Order of operations 2:46-7 Number sentences
Number and Algebra	Representing Quantity Fractions B	**MA3-RQF-01:** compares and orders fractions with denominators of 2, 3, 4, 5, 6, 8 and 10	Recognise that a fraction can represent a division	1:05 Improper fractions, mixed numbers 1:12 Fractions 1:15 Operations with fractions 1:16 Subtracting with fractions 1:17-19 Equivalent fractions 1:20-21 Operations with fractions 1:22 Problems using fractions
			Compare common fractions with related denominators	
			Use equivalence to add and subtract fractional quantities	
		MA3-RQF-02: determines 1/2, 1/4, 1/5 and 1/10 of measures and quantities	Build up to the whole from a given fractional part	1:13-14 Fractions of a group 1:22 Problems using fractions
			Find fractional quantities of whole numbers (halves, quarters, fifths and tenths)	
Measurement	Geometric Measure B	**MA3-GM-01:** locates and describes points on a coordinate plane	Position: Use the 4 quadrants of the coordinate plane	4:10 Compass directions 4:11 Using maps 4:12 The number plane 4:13 Number plane challenge 4:14 The four quadrants
		MA3-GM-02: selects and uses the appropriate unit and device to measure lengths and distances including perimeters	Length: Connect decimal representations to the metric system	3:01 Centimetres and millimetres 3:02 Kilometres 3:05 Units of length 3:06 Measuring length 3:08 Perimeter and area
			Length: Convert between common metric units of length	3:03-4 Converting measurements 3:05 Units of length
			Length: Solve problems involving the comparison of lengths using appropriate units	3:10 Area and perimeter problems 3:13 Perimeter and area 3:14 Area strategy 3:15 Comparing area and perimeter
		MA3-GM-03: measures and constructs angles,	Angles: Investigate angles on a straight line and angles at a point	4:03 Angle types 4:04 Angles

		and identifies the relationships between angles on a straight line and angles at a point	Angles: Investigate the relationships formed by the intersection of straight lines	4:05 Angles within patterns 4:06 Complementary angles 4:07 Supplementary angles 4:08 Angles at a point 4:09 Vertically opposite angles
Space	Two-Dimensional (2D) Spatial Structure B	**MA3-2DS-01:** investigates and classifies two-dimensional shapes, including triangles and quadrilaterals based on their properties	2D shapes: Dissect two-dimensional shapes and rearrange them using translations, reflections and rotations	4:01 Space review 4:02 Transformations 4:05 Angles within patterns
		MA3-2DS-02: selects and uses the appropriate unit to calculate areas, including areas of rectangles	Area: Find the area of composite figures	3:07 Area of a rectangles 3:08 Perimeter and area 3:09 Area of a parallelogram 3:10 Area and perimeter problems 3:11 Area of a triangle 3:12 Area 3:13 Perimeter and area 3:14 Area strategy 3:15 Comparing area and perimeter 3:29 Hectares 3:30 Square kilometres
		MA3-2DS-03: combines, splits and rearranges shapes to determine the area of parallelograms and triangles	Area: Calculate the area of a parallelogram using subdivision and rearrangement	3:08 Perimeter and area 3:09 Area of a parallelogram 3:10 Area and perimeter problems 3:11 Area of a triangle
			Area: Determine the area of a triangle	
Space	Three-Dimensional (3D) Spatial Structure B	**MA3-3DS-01:** visualises, sketches and constructs three-dimensional objects, including prisms and pyramids, making connections to two-dimensional representations	3D objects: Construct prisms and pyramids	4:01 Space review 4:15 Naming 3D solids 4:16 Drawing 3D objects 4:17 Properties of 3D objects 4:18 Nets of prisms 4:19 Nets of pyramids 4:20 Sections and views of 3D objects
		MA3-3DS-02: selects and uses the appropriate unit to estimate, measure and calculate volumes and capacities	Volume: Use cubic metres for measurement of volume	3:16 mL and L 3:17 Millilitres and Litres 3:26-8 Volume of prisms
			Volume: Recognise the multiplicative structure for finding volume	
			Volume: Find the volumes of rectangular prisms in cubic centimetres and cubic metres	
Measurement	Non-Spatial Measure B	**MA3-NSM-01:** selects and uses the appropriate unit and device to measure the masses of objects	Mass: Convert between common metric units of mass	3:18-9 Tonnes 3:20-21 Units of mass
		MA3-NSM-02: measures and compares duration, using 12- and 24-hour time and am and pm notation	Time: Solve problems involving duration, using 12- and 24-hour time	3:22 Elapsed time 3:23-4 Timetables 3:25 Time problems 3:31 Time zones
Statistics	Data B	**MA3-DATA -01:** constructs graphs using many-to-one scales	Interpret and compare a range of data displays	5:02 Side-by-side column graphs 5:03 Line graphs 5:09 The spread of scores 5:10 Frequency histograms 5:13 Chance using two dice 5:14 Chance: Expected results 5:15 Chance simulations

			Interpret data presented in digital media and elsewhere	5:16 Using samples 5:17 Repeating an experiment 5:18 Likely make up 5:20 Timelines
		MA3-DATA-02: interprets data displays, including timelines and line graphs		5:01 Tables and graphs 5:02 Side-by-side column graphs 5:03 Line graphs 5:07 Mode and range 5:08 The median 5:09 The spread of scores 5:10 Frequency histograms 5:11-12 Misleading displays 5:19 Unusual graphs 5:20 Timelines
Probability	Chance B	**MA3-CHAN-01:** conducts chance experiments and quantifies the probability	Compare observed frequencies of outcomes with expected results Create random generators and describe probabilities using fractions Conduct chance experiments with both small and large numbers of trials	5:04 Chance as a fraction 5:05 Chance as a percentage of decimal 5:06 Ordering probabilities 5:13 Chance using two dice 5:14 Chance: Expected results 5:15 Chance simulations 5:16 Using samples 5:17 Repeating an experiment 5:18 Likely make up