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| **Australian Signpost Maths NSW Stage 2 (Year 4) Syllabus Map** |
| **Strand** | **Substrand** | **New NSW Outcome** | **New Content Description** | **Australian Signpost Maths NSW Lessons** |
| Number and Algebra | Representing Numbers Using Place Value B | **MA2-RN-01:** applies an understanding of place value and the role of zero to represent numbers to at least tens of thousands | Whole Numbers: Order numbers in the thousands | 1:01 Numbers to 10 0001:02 Numbers to 100 0001:03 & 11 Rounding off1:04 Partitioning large numbers1:09-10 Numbers to 1 000 000 |
| Whole Numbers: Apply place value to partition, regroup and rename numbers up to 4 digits |
| Whole Numbers: Recognise and represent numbers that are 10, 100 or 1000 times as large |
| **MA2-RN-02:** represents and compares decimals up to 2 decimal places using place value | Decimals: Extend the application of the place value system from whole numbers to tenths and hundredths | 1:15 Tenths and fifths1:16 Place value using tenths1:17-18 Decimals1:19 Decimals and place value1:20 Comparing decimals1:21-22 Place value to hundredths1:23 Reading and writing decimals |
| Decimals: Make connections between fractions and decimal notation |
| Number and Algebra | Additive Relations B | **MA2-AR-01:** selects and uses mental and written strategies for addition and subtraction involving 2- and 3-digit numbers  | Partition, rearrange and regroup numbers to at least 1000 to solve additive problems | 2:05 Addition, no trading2:06 Addition and subtraction, no trading2:07-8 Addition to 99 with trading2:09 Jump strategy, +2:10 Jump strategy, -2:13 Addition, trading 2 tens2:14 Addition involving hundreds2:15 Addition problems to 992:18 & 20 Subtraction with trading2:19 Subtracting from tens2:23-4 Addition to 9992:25 Writing algorithms2:26 What's the rule?2:27 Number patterns2:31 Subtraction without trading to 9992:32-3 Subtraction with trading to 9992:34 Subtraction with 2 trades to 9992:35 Mental strategies, +2:36 Mental strategies, + and –2:37 Subtraction from hundreds2:38 Subtraction from hundreds strategy2:43 Odd and even numbers2:44 Odd and even2:51 Money2:52 Rounding off money2:53 Counting change2:58 Partitioning, + and –2:59 Mental strategies, + and - |
| Apply addition and subtraction to familiar contexts, including money and budgeting |
| **MA2-AR-02**: completes number sentences involving addition and subtraction by finding missing values | Complete number sentences involving additive relations to find unknown quantities | 2:57 Missing number strategies |
| Number and Algebra | Multiplicative Relations B | **MA2-MR-01**: Represents and uses the structure of multiplicative relations to 10 × 10 to solve problems **MA2-MR-02:** completes number sentences involving multiplication and division by finding missing values  | Investigate number sequences involving related multiples | 2:01 Number patterns2:02 Multiplication tables revision2:03 x 4 tables2:04 Times tables review2:11-12 x 8 tables2:16 x 3, x 6 tables2:17 x 3 and x 6 tables2:21-22 x 9 tables2:28-29 x 7 tables2:30 Multiplication review2:39 Division as repeated subtraction2:40 Understanding division2:41-42 & 50 Division facts2:44 Odd and even2:45 Division using grid2:46 x and ÷ (by 2, 4, 8)2:47 Mental strategies, x and ÷2:48 Working with numbers2:49 x and ÷ tables (by 3, 6, 9)2:54 Multiplying by 10, 100, 10002:55 Dividing by 10, 100, 10002:56 Linking ÷ and x2:57 Missing number strategies |
| Use known number facts and strategies |
| Use the structure of the area model to represent multiplication and division |
| Use number properties to find related multiplication facts |
| Operate with multiples of 10 |
| Represent and solve word problems with number sentences involving multiplication or division |
| Number and Algebra | Partitioned Fractions B | **MA2-PF-01:** represents and compares halves, quarters, thirds and fifths as lengths on a number line and their related fractions formed by halving (eighths, sixths and tenths)  | Model equivalent fractions as lengths | 1:05 Fractions1:06 & 14 Comparing fractions1:07-8 Fractions beyond 11:12-13 Equivalent fractions |
| Represent fractional quantities equal to and greater than one |
| Measurement  | Geometric Measure B  | **MA2-GM-01:** uses grid maps and directional language to locate positions and follow routes  | Position: Create and interpret grid maps | 4:12 Maps4:13 Creating a map4:16-17 Compass directions4:18 Describing position4:19 Using position in maps4:26 Spreadsheets |
| Position: Use directional language and describe routes with grid maps |
| **MA2-GM-02:** measures and estimates lengths in metres, centimetres and millimetres | Length: Use scaled instruments to measure and compare lengths | 3:05 Perimeter3:06 Centimetres and millimetres3:07 Using millimetres3:11 Using measurement scales3:21 Recording length3:22 Comparing measurements3:23 Using measurement scales 3:32 Comparing lengths3:33 Length on a map3:35-6 Problem solving3:38 Personal benchmarks |
| **MA2-GM-03:** identifies angles and classifies them by comparing to a right angle | Angles: Compare angles to a right angle | 4:02 Angles and 2D shapes4:03 Comparing angles4:08 Drawing angles4:09 Angles at quarter and half turns4:21 Acute and obtuse angles4:22 Angles of any size |
| Space | Two-Dimensional (2D) Spatial Structure B | **MA2-2DS-01:** compares two-dimensional shapes and describes their features  | 2D shapes: Create two-dimensional shapes that result from combining and splitting common shapes | 4:10 Investigating polygons4:23 Horizontal and vertical |
| **MA2-2DS-02:** performs transformations by combining and splitting two-dimensional shapes | 2D shapes: Create symmetrical patterns and shapes | 4:01 Flip, slide and turn4:11 & 20 Visualising shapes4:24 Tessellating designs4:25 Tessellations |
| **MA2-2DS-03:** estimates, measures and compares areas using square centimetres and square metres  | Area: Measure the areas of shapes using the grid structure | 3:08-10 The square centimetre3:24 The square metre3:25-6 The area of a triangle3:38 Personal benchmarks |
| Area: Compare surfaces using familiar metric units of area |
| Space | Three-Dimensional (3D) Spatial Structure B | **MA2-3DS-01:** makes and sketches models and nets of three-dimensional objects including prisms and pyramids  | 3D objects: Connect three-dimensional objects and two-dimensional representations | 4:04 3D objects4:05 & 7 Prisms and pyramids4:06 Faces of prisms and pyramids4:14 Cones, cylinders and spheres4:15 Views of 3D objects4:27 Drawing views of objects |
| **MA2-3DS-02:** estimates, measures and compares capacities (internal volumes) using litres, millilitres and volumes using cubic centimetres  | Volume: Use scaled instruments to measure and compare capacities (internal volumes) | 3:12 The millilitre3:13-14 Using millilitres3:15 Using L and mL3:23 Using measurement scales3:35-6 Problem solving3:37 Calculating volume3:38 Personal benchmarks |
| Measurement | Non-Spatial Measure B | **MA2-NSM-01:** estimates, measures and compares the masses of objects using kilograms and grams  | Mass: Use scaled instruments to measure and compare masses | 3:11 Using measurement scales3:16 & 27 Using grams3:17 & 28 Measuring mass3:23 Using measurement scales3:35-6 Problem solving3:38 Personal benchmarks |
| **MA2-NSM-02:** represents and interprets analog and digital time in hours, minutes and seconds  | Time: Represent and interpret digital time displays | 3:01 Analog time3:02-4 Analog and digital time3:18 Telling time3:19 Time3:20 am and pm time3:29 Using am and pm time3:30 Seconds3:31 The stopwatch3:35 Problem solving |
| Time: Use am and pm notation |
| Statistics | Data B | **MA2-DATA-01:** collects discrete data and constructs graphs using a given scale **MA2-DATA-02:** interprets data in tables, dot plots and column graphs  | Select and trial methods for data collection | 5:01 Drawing tables5:04 Using graphs5:05 Reading graphs5:08 Tally marks5:09 Collecting information5:12 Surveys5:13 Graphing data5:15 Carry out your own survey |
| Construct and interpret data displays with many-to-one scales |
| Probability | Chance B | **MA2-CHAN-01:** records and compares the results of chance experiments  | Describe the likelihood of outcomes of chance events | 5:02-3 Chance5:06 Ordered events5:07 Chance used in games5:10 Using spinners5:11 Unequal outcomes5:14 & 16 Chance experiments |
| Identify when events are affected by previous events |