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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 10 000  1:02 Numbers to 100 000  1:03 & 11 Rounding off  1:04 Partitioning large numbers  1:09-10 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 fifths  1:16 Place value using tenths  1:17-18 Decimals  1:19 Decimals and place value  1:20 Comparing decimals  1:21-22 Place value to hundredths  1:23 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 trading  2:06 Addition and subtraction, no trading  2:07-8 Addition to 99 with trading  2:09 Jump strategy, +  2:10 Jump strategy, -  2:13 Addition, trading 2 tens  2:14 Addition involving hundreds  2:15 Addition problems to 99  2:18 & 20 Subtraction with trading  2:19 Subtracting from tens  2:23-4 Addition to 999  2:25 Writing algorithms  2:26 What's the rule?  2:27 Number patterns  2:31 Subtraction without trading to 999  2:32-3 Subtraction with trading to 999  2:34 Subtraction with 2 trades to 999  2:35 Mental strategies, +  2:36 Mental strategies, + and –  2:37 Subtraction from hundreds  2:38 Subtraction from hundreds strategy  2:43 Odd and even numbers  2:44 Odd and even  2:51 Money  2:52 Rounding off money  2:53 Counting change  2:58 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 patterns  2:02 Multiplication tables revision  2:03 x 4 tables  2:04 Times tables review  2:11-12 x 8 tables  2:16 x 3, x 6 tables  2:17 x 3 and x 6 tables  2:21-22 x 9 tables  2:28-29 x 7 tables  2:30 Multiplication review  2:39 Division as repeated subtraction  2:40 Understanding division  2:41-42 & 50 Division facts  2:44 Odd and even  2:45 Division using grid  2:46 x and ÷ (by 2, 4, 8)  2:47 Mental strategies, x and ÷  2:48 Working with numbers  2:49 x and ÷ tables (by 3, 6, 9)  2:54 Multiplying by 10, 100, 1000  2:55 Dividing by 10, 100, 1000  2:56 Linking ÷ and x  2:57 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 Fractions  1:06 & 14 Comparing fractions  1:07-8 Fractions beyond 1  1:12-13 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 Maps  4:13 Creating a map  4:16-17 Compass directions  4:18 Describing position  4:19 Using position in maps  4:26 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 Perimeter  3:06 Centimetres and millimetres  3:07 Using millimetres  3:11 Using measurement scales  3:21 Recording length  3:22 Comparing measurements  3:23 Using measurement scales  3:32 Comparing lengths  3:33 Length on a map  3:35-6 Problem solving  3:38 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 shapes  4:03 Comparing angles  4:08 Drawing angles  4:09 Angles at quarter and half turns  4:21 Acute and obtuse angles  4:22 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 polygons  4:23 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 turn  4:11 & 20 Visualising shapes  4:24 Tessellating designs  4:25 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 centimetre  3:24 The square metre  3:25-6 The area of a triangle  3:38 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 objects  4:05 & 7 Prisms and pyramids  4:06 Faces of prisms and pyramids  4:14 Cones, cylinders and spheres  4:15 Views of 3D objects  4:27 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 millilitre  3:13-14 Using millilitres  3:15 Using L and mL  3:23 Using measurement scales  3:35-6 Problem solving  3:37 Calculating volume  3:38 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 scales  3:16 & 27 Using grams  3:17 & 28 Measuring mass  3:23 Using measurement scales  3:35-6 Problem solving  3:38 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 time  3:02-4 Analog and digital time  3:18 Telling time  3:19 Time  3:20 am and pm time  3:29 Using am and pm time  3:30 Seconds  3:31 The stopwatch  3:35 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 tables  5:04 Using graphs  5:05 Reading graphs  5:08 Tally marks  5:09 Collecting information  5:12 Surveys  5:13 Graphing data  5:15 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 Chance  5:06 Ordered events  5:07 Chance used in games  5:10 Using spinners  5:11 Unequal outcomes  5:14 & 16 Chance experiments |
| Identify when events are affected by previous events |