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| **Australian Signpost Maths NSW Stage 3 (Year 5) Syllabus Map** |
| **Strand** | **Substrand** | **New NSW Outcome** | **New Content Description** | **Australian Signpost Maths NSW Lessons** |
| Number and Algebra | Represents Numbers A | **MA3-RN-01:** applies an understanding of place value and the role of zero to represent the properties of numbers | Create fractional parts of a length using techniques other than repeated halving | 1:01 Numbers using millions1:02 Large numbers1:03 Using large numbers1:23 Using fractions1:25 Using decimals |
| Model and represent unit fractions, and their multiples, to complete a whole on a number line |
| **MA3-RN-02:** compares and orders decimals up to 3 decimal places | Decimals and percentages: Recognise that the place value system can be extended beyond hundredths | 1:07 Tenths and hundredths1:14 Place value to thousandths1:15 Place value and decimals1:20 Comparing decimals1:21 Comparing decimals1:25 Using decimals1:26 Patterns and percentages |
| Decimals and percentages: Compare, order and represent decimals |
| **MA3-RN-03:** determines percentages of quantities, and finds equivalent fractions and decimals for benchmark percentage values |  | 1:06 Mixed numbers1:08 Percentages1:09 Using percentages1:10 Fractions1:26 Patterns and percentages |
| Number and Algebra | Additive Relations A | **MA3-AR-01:** selects and applies appropriate strategies to solve addition and subtraction problems | Apply efficient mental and written strategies to solve addition and subtraction problems | 2:05 Strategies, + and –2:06 Addition to 9992:07 Addition to 9992:08 Using the addition algorithm2:09 Subtraction with trading2:10 Subtraction to 9992:14 Addition of money2:15 Subtraction of money2:16 Shopping2:20 Subtraction to 9992:21 Subtraction from hundreds2:22-3 Addition to 99992:24 Subtraction to 99992:25 Subtraction from 1000s2:26 Subtraction from 1000s strategy2:46 Problems involving change of units2:47 Estimating by rounding2:49 Using your income2:50 Making a budget2:51 Using operations to solve problems2:58 Finding missing numbers |
| Use estimation and place value understanding to determine the reasonableness of solutions |
| Number and Algebra | Multiplicative Relations A | **MA3-MR-01**: selects and applies appropriate strategies to solve multiplication and division problems**MA3-MR-02:** constructs and completes number sentences involving multiplicative relations, applying the order of operations to calculations | Determine products and factors | 2:01 Learning your multiplication tables2:02 Division facts2:03 Division with remainders2:04 Rounding2:11 Multiples2:12 Factors2:13 Prime and composite numbers2:17 Division with remainders2:18 Division of 2-digit numbers2:19 Using division facts2:27-29 Dividing 2-digit numbers2:30 Dividing 3-digit numbers2:31 Multiplying tens2:32 Multiplying tens or hundreds2:33 Dividing 3-digit numbers by 102:34 Dividing with zero in the answer2:35 Divisibility2:36 Factors and multiples2:37 Using factors in multiplication2:38-9 Averages2:40 Mental strategies for multiplication2:41 Multiplying 2-digit numbers2:42-3 The extended form of multiplication2:44-5 The contracted form of multiplication2:46 Problems involving change of units2:47-8 Estimation by rounding2:51 Using operations to solve problems2:52 Estimating products2:53 Strategies for multiplication2:54-7 Multiplication by 2-digit numbers2:58 Finding missing numbers |
| Use partitioning and place value to multiply 2-, 3- and 4-digit numbers by one-digit numbers |
| Select and apply mental and written strategies to multiply 2- and 3-digit numbers by 2-digit numbers |
| Represent and solve division problems with whole number remainders |
| Select and apply strategies to divide a number with 3 or more digits by a one-digit divisor |
| Use estimation and rounding to check the reasonableness of answers to calculations |
| Number and Algebra | Representing Quantity Fractions A | **MA3-RQF-01:** compares and orders fractions with denominators of 2, 3, 4, 5, 6, 8 and 10**MA3-RQF-02:** determines 1/2, 1/4, 1/5 and 1/10 of measures and quantities | Recognise the role of the number 1 as representing the whole | 1:04 Fractions1:05 The order of fractions1:06 Mixed numbers1:10 Fractions1:11 Improper fractions, mixed numbers1:12 Addition of fractions1:13 Subtraction of fractions1:16 Addition and subtraction of fractions1:17-19 Equivalent fractions1:22 Subtraction from whole numbers1:24 Solving problems with fractions1:26 Patterns and percentages |
| Compare and order common unit fractions |
| Solve problems involving addition and subtraction of fractions with the same denominator |
| Measurement  | Geometric Measure A  | **MA3-GM-01:** locates and describes points on a coordinate plane | Position: Explore the Cartesian coordinate system | 4:06 Describing position4:11 Compass directions4:12 Reading a map4:17 Coordinates on the number plane4:18 Using coordinates4:21 Mapping Australia |
| **MA3-GM-02:** selects and uses the appropriate unit and device to measure lengths and distances including perimeters | Length: Use metres and kilometres for length and distances | 3:01 Kilometres3:02 Kilometres and metres3:13 Using measurement scales3:14 Millimetres3:15 Converting length measurements |
| Length: Measure lengths to find perimeters | 3:03-4 Perimeter3:20 Perimeter3:21 Exploring perimeter and area |
| **MA3-GM-03:** measures and constructs angles, and identifies the relationships between angles on a straight line and angles at a point | Angles: Estimate, measure and compare angles using degrees | 4:08 Angle types in degrees4:10 Classifying angles4:14 Measuring angles of rotation4:19 Drawing angles4:20 Angles greater than 180o |
| Angles: Use a protractor to measure and identify types of angles | 4.07 and 09 Using a protractor4:10 Classifying angles |
| Space | Two-Dimensional (2D) Spatial Structure A | **MA3-2DS-01:** investigates and classifies two-dimensional shapes, including triangles and quadrilaterals based on their properties | 2D shapes: Classify two-dimensional shapes and describe their properties | 4:03 Triangles4:04 Quadrilaterals4:13 and 15 Rotational symmetry |
| **MA3-2DS-02:** selects and uses the appropriate unit to calculate areas, including areas of rectangles | Area: Use hectares and square kilometres as units of measurement for area |  |
| Area: Calculate the areas of rectangles using familiar metric units |  |
| **MA3-2DS-03**: combines, splits and rearranges shapes to determine the area of parallelograms and triangles |  |  |
| Space | Three-Dimensional (3D) Spatial Structure A | **MA3-3DS-01:** visualises, sketches and constructs three-dimensional objects, including prisms and pyramids, making connections to two-dimensional representations | 3D objects: Compare, describe and name prisms and pyramids |  |
| 3D objects: Connect three-dimensional objects with two-dimensional representations |  |
| **MA3-3DS-02:** selects and uses the appropriate unit to estimate, measure and calculate volumes and capacities | Volume: Choose appropriate units of measurement for capacity |  |
| Volume: Use displacement to investigate volumes of irregular solids |  |
| Volume: Connect decimal representations to the metric system |  |
| Measurement | Non-Spatial Measure A | **MA3-NSM-01:** selects and uses the appropriate unit and device to measure the masses of objects | Mass: Choose appropriate units of measurement for mass |  |
| Mass: Connect decimal representations to the metric system |  |
| **MA3-NSM-02:** measures and compares duration, using 12- and 24-hour time and am and pm notation | Time: Compare 12- and 24-hour time systems and convert between them |  |
| Statistics | Data A | **MA3-DATA-01:** constructs graphs using many-to-one scales**MA3-DATA-02:** interprets data displays, including timelines and line graphs | Collect categorical and discrete numerical data by observation or survey |  |
| Choose and use appropriate tables and graphs |
| Describe and interpret different datasets in context |
| Probability | Chance A | **MA3-CHAN-01:** conducts chance experiments and quantifies the probability | List outcomes of chance experiments involving equally likely outcomes and represent probabilities |  |

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