



Surveyors Creek PS

Mathematics Scope & Sequence

Stage Two

*These documents are to be used in conjunction when planning a teaching cycle for each term. The scope and sequences have been colour coded to match the syllabus colour and to match the colour assigned to each stage:

Early Stage 1 = Yellow Stage 1 = Pink Stage 2 = Green Stage 3 = Orange



S2 Mathematics Scope and Sequence

Term 1

NOTE: Working mathematically should be imbedded into all mathematics lesson/activities.

MA2-1WM describes mathematical situations and methods using everyday and some mathematical language, actions, materials, diagrams and symbols

MA2-2WM uses objects, diagrams and technology to explore mathematical problems

MA2-3WM supports conclusions by explaining or demonstrating how answers were

| Week | Outcomes | Content | Assessment |
|------|--|--|----------------------|
| 1 | Initial Assessment | SENA 1 –Resources/Activities SENA 1 – Recording Sheet SENA 2 –Resources/Activities SENA 2 – Recording Sheet SENA 3 – Resources/Activities SENA 3 – Recording Sheet SENA 4 – Resources/Activities SENA 4 – Recording Sheet | Pre-Test SENA 1-4 |
| | Data (1) MA2-18SP selects appropriate methods to collect data, and constructs, compares, interprets and evaluates data displays, including tables, picture graphs and column graphs | <ul style="list-style-type: none"> ○ Pose questions that require data collection ○ Collect data and create a list or table to organise the data ○ Use computer software to create a table to organise collected data ○ Construct graphs that represent data using one-to-one correspondence | |
| 2 | Whole Number (1) MA2-4NA applies place value to order, read and represent numbers of up to five digits | <ul style="list-style-type: none"> ○ Apply an understanding of place value and the role of zero to read, write and order numbers of up to four digits ○ Use place value to partition numbers of up to four digits | |
| | Data (1) MA2-18SP selects appropriate methods to collect data, and constructs, compares, interprets and evaluates data displays, including tables, picture graphs and column graphs | <ul style="list-style-type: none"> ○ Describe and interpret information presented in simple tables, column graphs and picture graphs ○ Make conclusions about data presented in different data displays | |



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| 3 | <p>Addition and Subtraction (1) – ADDITION ONLY MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four and five-digit numbers</p> | <ul style="list-style-type: none"> ○ Add three or more single-digit numbers ○ Apply known single-digit addition and subtraction facts to mental strategies for addition and subtraction of two-, three- and four-digit numbers, including: - the jump strategy on an empty number line - using place value to partition numbers | |
| | <p>Length (1) MA2-9MG - measures, records, compares and estimates lengths, distances and perimeters in metres, centimetres and millimetres, and measures, compares and records temperatures</p> | <ul style="list-style-type: none"> ○ Estimate, measure, record and compare lengths and distances using metres and centimetres | |
| 4 | <p>Addition and Subtraction (1) – SUBTRACTION ONLY MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four and five-digit numbers</p> | <ul style="list-style-type: none"> ○ Apply known single-digit subtraction facts to mental strategies for addition and subtraction of two-, three- and four-digit numbers, including: ○ the jump strategy on an empty number line ○ - using place value to partition numbers | |
| | <p>Length (1) MA2-9MG - measures, records, compares and estimates lengths, distances and perimeters in metres, centimetres and millimetres, and measures, compares and records temperatures</p> | <ul style="list-style-type: none"> ○ Estimate, measure and record lengths to the nearest millimetre, using a ruler and the abbreviation mm | |
| | <p>Patterns and Algebra MA2-8NA - generalises properties of odd and even numbers, generates number patterns,</p> | <ul style="list-style-type: none"> ○ Identify even or odd numbers of up to four digits ○ Model even and odd numbers of up to two digits using arrays with two rows | |



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| 5 | and completes simple number sentences by calculating missing values | <ul style="list-style-type: none"> ○ Recognise the connection between even numbers and the multiplication facts for two | |
| | Volume and Capacity MA2-11MG - measures, records, compares and estimates volumes and capacities using litres, millilitres and cubic centimetres | <ul style="list-style-type: none"> ○ Estimate, measure, order and compare objects using familiar metric units of capacity and using the abbreviation for litres (L) | |
| 6 | Patterns and Algebra MA2-8NA - generalises properties of odd and even numbers, generates number patterns, and completes simple number sentences by calculating missing values | <ul style="list-style-type: none"> ○ Describe, continue and create number patterns resulting from performing addition or subtraction ○ Identify and describe patterns when counting forwards or backwards by threes, fours, sixes, sevens, eights and nines from any starting point | |
| | Volume and Capacity MA2-11MG - measures, records, compares and estimates volumes and capacities using litres, millilitres and cubic centimetres | <ul style="list-style-type: none"> ○ Measure and compare objects using cubic centimetres abbreviated to cm^3 ○ Construct three-dimensional objects using cubic-centimetre blocks and count the blocks to determine the volumes of the objects ○ Distinguish between mass and volume | |
| 7 | Multiplication and Division (1) MA2-6NA - uses mental and informal written strategies for multiplication and division | <ul style="list-style-type: none"> ○ Use mental strategies to recall multiplication facts for multiples of two, three, five and ten ○ Link multiplication and division facts using groups or arrays ○ Model and apply the commutative property of multiplication | |
| | 2D Space (1) MA2-15MG manipulates, identifies and sketches two-dimensional shapes, including | <ul style="list-style-type: none"> ○ Identify and describe two-dimensional shapes as either 'regular' or 'irregular' ○ Draw representations of regular and irregular two-dimensional | |



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| | special quadrilaterals, and describes their features | shapes in different orientations <ul style="list-style-type: none">○ Construct regular and irregular two-dimensional shapes from a variety of materials comparing the rigidity of three and four-sided shapes (Links to STEM Day – strong shapes)○ Identify symmetry in the environment○ Identify and draw lines of symmetry on given shapes, including the special quadrilaterals and other regular and irregular shapes | |
| 8 | Multiplication and Division (1) MA2-6NA - uses mental and informal written strategies for multiplication and division | <ul style="list-style-type: none">○ Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies○ Use mental strategies to multiply a one-digit number by a multiple of 10, including: repeated addition○ Use place value concepts | |
| | 2D Space (1) MA2-15MG manipulates, identifies and sketches two-dimensional shapes, including special quadrilaterals, and describes their features | <ul style="list-style-type: none">○ Manipulate, compare and describe features of two-dimensional shapes, including the special quadrilaterals: parallelograms, rectangles, rhombuses, squares, trapeziums and kites○ Identify and name the special quadrilaterals presented in different orientations○ Identify right angles in squares and rectangles | |
| 9 | Fractions and Decimals (1) MA2-7NA – represents, models and compares commonly used fractions and decimals | <ul style="list-style-type: none">○ Use the terms 'fraction', 'denominator' and 'numerator' appropriately when referring to fractions○ Model fractions with denominators of 2, 3, 4, 5 and 8 of whole objects, shapes and collections using concrete materials and diagrams○ Recognise that as the number of parts that a whole is divided into becomes larger, the size of each part becomes smaller | |



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| | <p>3D Space (1) MA2-14MG – makes, compares, sketches and names three-dimensional objects, including prisms, pyramids, cylinders, cones and spheres, and describes their features</p> | <ul style="list-style-type: none"> ○ Make models of three-dimensional objects and describe key features ○ Identify and name three-dimensional objects as prisms (including cubes), pyramids, cylinders, cones and spheres ○ Identify prisms (including cubes), pyramids, cylinders, cones and spheres in the environment and from drawings, photographs and descriptions ○ Deconstruct everyday packages that are prisms (including cubes) to create nets | |
| 10 | <p>Fractions and Decimals (1) MA2-7NA – represents, models and compares commonly used fractions and decimals</p> | <ul style="list-style-type: none"> ○ Count by quarters, halves and thirds, including with mixed numerals; locate and represent these fractions on a number line ○ Identify and describe 'mixed numerals' as having a whole-number part and a fractional part ○ Place halves, quarters, eighths and thirds on number lines between 0 and 1 | |
| | <p>3D Space (1) MA2-14MG – makes, compares, sketches and names three-dimensional objects, including prisms, pyramids, cylinders, cones and spheres, and describes their features</p> | <ul style="list-style-type: none"> ○ Recognise that a net requires each face to be connected to at least one other face ○ Investigate, make and identify the variety of nets that can be used to create a particular prism, such as the variety of nets that can be used to make a cube ○ Distinguish between (flat) nets, which are 'two-dimensional', and objects created from nets, which are 'three-dimensional' | |



S2 Mathematics Scope and Sequence

Term 2

NOTE: Working mathematically should be imbedded into all mathematics lesson/activities.

MA2-1WM describes mathematical situations and methods using everyday and some mathematical language, actions, materials, diagrams and symbols

MA2-2WM uses objects, diagrams and technology to explore mathematical problems

MA2-3WM supports conclusions by explaining or demonstrating how answers were

| Week | Outcomes | Content | Assessment |
|------|---|---|------------|
| 1 | Whole Number (1) MA2-4NA applies place value to order, read and represent numbers of up to five digits | <ul style="list-style-type: none"> ○ Use place value to compare and explain the relative size of four-digit numbers ○ Use the terms and symbols for 'is less than' (<) and 'is greater than' (>) to show the relationship between two numbers | |
| | Time (1) MA2-13MG – reads and records time in one-minute intervals and converts between hours, minutes and seconds | <ul style="list-style-type: none"> ○ Read analog and digital clocks to the minute, including using the terms 'past' and 'to' | |
| 2 | Whole Number (1) MA2-4NA applies place value to order, read and represent numbers of up to five digits | <ul style="list-style-type: none"> ○ Round numbers to the nearest ten, hundred or thousand | |
| | Time (1) MA2-13MG – reads and records time in one-minute intervals and converts between hours, minutes and seconds | <ul style="list-style-type: none"> ○ Read analog and digital clocks to the minute, including using the terms 'past' and 'to' | |
| 3 | Addition and Subtraction (1) MA2-5NA – uses mental and written | <ul style="list-style-type: none"> ○ Use the equals sign to record equivalent number sentences involving addition and subtraction | |



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| | <p>strategies for addition and subtraction involving two-, three-, four- and five-digit numbers</p> | <ul style="list-style-type: none"> ○ Demonstrate how addition and subtraction are inverse operations ○ Explain and check solutions to problems, including by using the inverse operation | |
| | <p>Mass (1) MA2-12MG - measures, records, compares and estimates the masses of objects using kilograms and grams</p> | <ul style="list-style-type: none"> ○ Estimate, measure, order and compare objects using kilograms and the abbreviation kg ○ Recognise that objects with a mass of one kilogram can be a variety of shapes and sizes | |
| 4 | <p>Addition and Subtraction (1) MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four and five-digit numbers</p> | <ul style="list-style-type: none"> ○ Apply known single-digit addition and subtraction facts to mental strategies for addition and subtraction of two-, three- and four-digit numbers, including: <ul style="list-style-type: none"> ○ using patterns to extend number facts ○ the split strategy ○ bridging the decades | |
| | NAPLAN | NAPLAN | NAPLAN |
| 5 | <p>Patterns and Algebra MA2-8NA - generalises properties of odd and even numbers, generates number patterns, and completes simple number sentences by calculating missing values</p> | <ul style="list-style-type: none"> ○ Investigate and use the properties of even and odd numbers ○ Investigate and generalise the result of adding, subtracting and multiplying pairs of even numbers, pairs of odd numbers, or one even and one odd number | |
| | <p>Length (1) (Perimeter) MA2-9MG - measures, records, compares and estimates lengths, distances and perimeters in metres, centimetres and millimetres, and measures, compares and records temperatures</p> | <ul style="list-style-type: none"> ○ Select and use an appropriate device to measure lengths and distances ○ Use the term 'perimeter' to describe the total distance around a two-dimensional shape ○ Estimate and measure the perimeters of two-dimensional shapes | |



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| 6 | Patterns and Algebra MA2-8NA - generalises properties of odd and even numbers, generates number patterns, and completes simple number sentences by calculating missing values | <ul style="list-style-type: none">○ Investigate visual number patterns on a number chart○ Investigate and generate number sequences involving multiples of 3, 4, 6, 7, 8 and 9○ Describe how the next term in a number pattern is calculated | |
| | Area (1) MA2-10MG - measures, records, compares and estimates areas using square centimetres and square metres | <ul style="list-style-type: none">○ Measure the areas of common two-dimensional shapes using a square-centimetre grid overlay○ Develop strategies for counting partial units in the total area of the shape○ Use efficient strategies for counting large numbers of square centimetres○ Measure the areas of rectangles (including squares) in square centimetres using the abbreviation cm^2 | |
| 7 | Multiplication and Division (1) MA2-6NA - uses mental and informal written strategies for multiplication and division | <ul style="list-style-type: none">○ Use mental strategies to multiply a one-digit number by a multiple of 10, including:<ul style="list-style-type: none">○ factorising the multiple of 10○ apply the inverse relationship of multiplication and division to justify answers | |
| | Position MA2-17MG uses simple maps and grids to represent position and follow routes, including using compass directions | <ul style="list-style-type: none">○ Use and follow positional and directional language○ Use grid references on maps to describe position | |



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| 8 | Multiplication and Division (1) MA2-6NA - uses mental and informal written strategies for multiplication and division | <ul style="list-style-type: none">○ Use mental strategies to multiply a one-digit number by a multiple of 10, including:<ul style="list-style-type: none">○ repeated addition○ using place value concepts○ Pose multiplication problems and apply appropriate strategies to solve them | |
| | Position MA2-17MG uses simple maps and grids to represent position and follow routes, including using compass directions | <ul style="list-style-type: none">○ Draw simple maps and plans from an aerial view, with and without labelling a grid○ Draw and describe routes or paths on grid-referenced maps and plans○ Use a legend (or key) to locate specific objects on a map | |
| 9 | Addition and Subtraction MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers | <ul style="list-style-type: none">○ Apply known single-digit addition and subtraction facts to mental strategies for addition and subtraction of two-, three- and four-digit numbers, including:<ul style="list-style-type: none">○ using patterns to extend number facts○ the split strategy○ bridging the decades○ Choose and apply efficient strategies for addition and subtraction○ Give a reasonable estimate for a problem, explain how the estimate was obtained, and check the solution | |
| | Chance MA2-19SP - describes and compares chance events in social and experimental contexts | <ul style="list-style-type: none">○ Conduct chance experiments, identify and describe possible outcomes, and recognise variation in results○ Use the term 'outcome' to describe any possible result of a chance experiment○ Keep a tally and graph the results of a chance experiment | |



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| 10 | Addition and Subtraction MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers | <ul style="list-style-type: none">○ Apply known single-digit addition and subtraction facts to mental strategies for addition and subtraction of two-, three- and four-digit numbers, including:<ul style="list-style-type: none">- the compensation strategy○ Select, use and record a variety of mental strategies to solve addition and subtraction problems, including word problems, with numbers of up to four digits○ Choose and apply efficient strategies for addition and subtraction | |
| | Chance MA2-19SP - describes and compares chance events in social and experimental contexts | <ul style="list-style-type: none">○ Predict the number of times each outcome should occur in a chance experiment involving a set number of trials, carry out the experiment, and compare the predicted and actual results○ Make statements that acknowledge 'randomness' in a situation Repeat a chance experiment several times and discuss why the results vary | |



S2 Mathematics Scope and Sequence

Term 3

NOTE: Working mathematically should be imbedded into all mathematics lesson/activities.

MA2-1WM describes mathematical situations and methods using everyday and some mathematical language, actions, materials, diagrams and symbols

MA2-2WM uses objects, diagrams and technology to explore mathematical problems

MA2-3WM supports conclusions by explaining or demonstrating how answers were

| Week | Outcomes | Content | Assessment |
|------|--|--|------------|
| 1 | Whole Number (2) MA2-4NA applies place value to order, read and represent numbers of up to five digits | <ul style="list-style-type: none"> ○ Recognise, represent and order numbers to at least tens of thousands ○ Arrange numbers of up to five digits in ascending and descending order | |
| | Data MA2-18SP selects appropriate methods to collect data, and constructs, compares, interprets and evaluates data displays, including tables, picture graphs and column graphs | <ul style="list-style-type: none"> ○ Create a survey and related recording sheet, considering the appropriate organisation of categories for data collection ○ Compare the effectiveness of different methods of collecting and recording data ○ Construct suitable data displays, with and without the use of digital technologies, from given or collected data; include tables | |
| 2 | Whole Number MA2-4NA applies place value to order, read and represent numbers of up to five digits | <ul style="list-style-type: none"> ○ Use place value to <u>partition</u> numbers of up to five digits and recognise this as 'expanded notation' ○ Partition numbers of up to five digits in non-standard forms ○ Round numbers to the nearest ten, hundred, thousand or ten thousand | |



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| | <p>Data MA2-18SP selects appropriate methods to collect data, and constructs, compares, interprets and evaluates data displays, including tables, picture graphs and column graphs</p> | <ul style="list-style-type: none"> ○ Represent given or collected categorical data in tables, column graphs and picture graphs, using a scale of many-to-one correspondence, with and without the use of digital technologies ○ Discuss and determine a suitable scale of many-to-one correspondence to draw graphs for large data sets and state the key used ○ Use grid paper to assist in drawing graphs that represent data using a scale of many-to-one correspondence ○ Use data in a spreadsheet to create column graphs with appropriately labelled axes | |
| <p>3</p> | <p>Addition and Subtraction (2) MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four and five-digit numbers</p> | <ul style="list-style-type: none"> ○ Calculate equivalent amounts of money using different denominations ○ Perform simple calculations with money, including finding change, and round to the nearest five cents ○ Calculate mentally to give change | |
| | <p>Position (2) MA2-17MG uses simple maps and grids to represent position and follow routes, including using compass directions</p> | <ul style="list-style-type: none"> ○ Determine the directions north, east, south and west when given one of the directions ○ Determine the directions NE, SE, SW and NW when given one of the directions | |
| <p>4</p> | <p>Addition and Subtraction (2) MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four and five-digit numbers</p> | <ul style="list-style-type: none"> ○ Apply known single-digit subtraction facts to mental strategies for addition and subtraction of two-, three- and four-digit numbers, including: <ul style="list-style-type: none"> ○ the jump strategy on an empty number line ○ - using place value to partition numbers | |



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| | <p>Position (2) MA2-17MG uses simple maps and grids to represent position and follow routes, including using compass directions</p> | <ul style="list-style-type: none"> ○ Use a legend (or key) to locate specific objects on a map ○ Use scales involving multiples of 10 to calculate the distance between two points on maps and plans ○ Interpret simple scales on maps and plans | |
| <p style="font-size: 2em; text-align: center;">5</p> | <p>Multiplication and Division (1) MA2-6NA - uses mental and informal written strategies for multiplication and division</p> | <ul style="list-style-type: none"> ○ Determine 'factors' for a given whole number ○ Multiply three or more single-digit numbers ○ Multiply by factorising the larger number | |
| | <p>Area (2) MA2-10MG - measures, records, compares and estimates areas using square centimetres and square metres</p> | <ul style="list-style-type: none"> ○ Recognise areas that are 'less than a square metre', 'about the same as a square metre' and 'greater than a square metre' ○ Record areas in square metres using words and the abbreviation for square metres (m²) ○ Estimate and compare the areas of rectangles (including squares) in square metres | |
| <p style="font-size: 2em; text-align: center;">6</p> | <p>Multiplication and Division (1) MA2-6NA - uses mental and informal written strategies for multiplication and division</p> | <ul style="list-style-type: none"> ○ Develop efficient mental and written strategies, and use appropriate digital technologies, for multiplication and for division where there is no remainder ○ Use mental and informal written strategies to multiply a two-digit number by a one-digit number, including: <ul style="list-style-type: none"> ○ using known facts ○ multiplying the tens and then the units | |
| | <p>Area (2) MA2-10MG - measures, records, compares and estimates areas using square centimetres and square metres</p> | <ul style="list-style-type: none"> ○ Recognise areas that are 'less than a square metre', 'about the same as a square metre' and 'greater than a square metre' ○ Record areas in square metres using words and the abbreviation for square metres (m²) ○ Estimate and compare the areas of rectangles (including squares) in square metres | |



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| 7 | Patterns and Algebra MA2-8NA - generalises properties of odd and even numbers, generates number patterns, and completes simple number sentences by calculating missing values | <ul style="list-style-type: none">○ Use inverse operations to complete number sentences○ Find the missing number in a number sentence involving operations of addition or subtraction on both sides of the equals sign | |
| | Angles MA2-16MG - identifies, describes, compares and classifies angles | <ul style="list-style-type: none">○ Classify angles as acute, right, obtuse, straight, reflex or a revolution○ Describe the size of different types of angles in relation to a right angle○ Create, draw and classify angles of various sizes | |
| 8 | Patterns and Algebra MA2-8NA - generalises properties of odd and even numbers, generates number patterns, and completes simple number sentences by calculating missing values | <ul style="list-style-type: none">○ Complete number sentences involving multiplication and division by calculating missing numbers○ Discuss whether it is more appropriate to represent the problem using \times or \div in order to calculate the solution○ Pose a word problem based on a given number sentence | |
| | Angles MA2-16MG - identifies, describes, compares and classifies angles | <ul style="list-style-type: none">○ Classify angles as acute, right, obtuse, straight, reflex or a revolution○ Describe the size of different types of angles in relation to a right angle○ Create, draw and classify angles of various sizes | |



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| 9 | Fractions and Decimals MA2-7NA – represents, models and compares commonly used fractions and decimals | <ul style="list-style-type: none"> ○ Model, compare and represent fractions with denominators of 2, 4 and 8; 3 and 6; and 5, 10 and 100 ○ Model, compare and represent the equivalence of fractions with related denominators by redividing the whole, using concrete materials, diagrams and number lines | |
| | Volume and Capacity MA2-11MG - measures, records, compares and estimates volumes and capacities using litres, millilitres and cubic centimetres | <ul style="list-style-type: none"> ○ Recognise that there are 1000 millilitres in one litre ○ Use the millilitre as a unit to measure volume and capacity, using a device calibrated in millilitres ○ Convert between millilitres and litres | |
| 10 | Fractions and Decimals (1) MA2-7NA – represents, models and compares commonly used fractions and decimals | <ul style="list-style-type: none"> ○ Recognise that the place value system can be extended to tenths and hundredths, and make connections between fractions and decimal notation ○ Recognise and apply decimal notation to express whole numbers, tenths and hundredths as decimals | |
| | Volume and Capacity MA2-11MG - measures, records, compares and estimates volumes and capacities using litres, millilitres and cubic centimetres | <ul style="list-style-type: none"> ○ Estimate and measure the capacity of a container in millilitres and check by measuring ○ Estimate and measure the change in water level when an object is submerged | |



S2 Mathematics Scope and Sequence

Term 4

NOTE: Working mathematically should be imbedded into all mathematics lesson/activities.

MA2-1WM describes mathematical situations and methods using everyday and some mathematical language, actions, materials, diagrams and symbols

MA2-2WM uses objects, diagrams and technology to explore mathematical problems

MA2-3WM supports conclusions by explaining or demonstrating how answers were

| Week | Outcomes | Content | Assessment |
|------|---|---|------------|
| 1 | Length (2) MA2-9MG - measures, records, compares and estimates lengths, distances and perimeters in metres, centimetres and millimetres, and measures, compares and records temperatures | <ul style="list-style-type: none"> Recognise the need for formal units to measure temperature Use a thermometer to measure and compare temperatures to the nearest degree Celsius Record temperatures to the nearest degree Celsius using the symbol for degrees (°) | |
| | Chance MA2-19SP - describes and compares chance events in social and experimental contexts | <ul style="list-style-type: none"> Use the terms 'equally likely', 'likely' and 'unlikely' to describe the chance of everyday events occurring Order events from least likely to most likely to occur Identify and discuss everyday events that cannot occur at the same time Identify and discuss events where the chance of one occurring will not be affected by the occurrence of the other | |
| 2 | Length (2) MA2-9MG - measures, records, compares and estimates lengths, distances and perimeters in metres, centimetres and millimetres, and measures, compares and records temperatures | <ul style="list-style-type: none"> Convert between metres and centimetres, and between centimetres and millimetres Describe one centimetre as one-hundredth of a metre and one millimetre as one-tenth of a centimetre Record lengths and distances using decimal notation to two decimal places | |



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| | <p>Time (2) MA2-17MG – reads and records time in one-minute intervals and converts between hours, minutes and seconds</p> | <ul style="list-style-type: none"> ○ Read and interpret simple timetables, timelines and calendars | |
| 3 | <p>Addition and Subtraction (2) MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four and five-digit numbers</p> | <ul style="list-style-type: none"> ○ Use a formal written algorithm to record addition and subtraction calculations involving two-, three-, four- and five-digit numbers | |
| | <p>Mass MA2-12MG - measures, records, compares and estimates the masses of objects using kilograms and grams</p> | <ul style="list-style-type: none"> ○ Recognise that there are 1000 grams in one kilogram ○ Use the gram as a unit to measure mass, using a scaled instrument ○ Record masses using kilograms and grams | |
| 4 | <p>Addition and Subtraction (2) MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four and five-digit numbers</p> | <ul style="list-style-type: none"> ○ Calculate change and round to the nearest five cents ○ Reflect on their chosen method of solution for a money problem, considering whether it can be improved ○ Use estimation to check the reasonableness of solutions to addition and subtraction problems, including those involving money | |
| | <p>Mass MA2-12MG - measures, records, compares and estimates the masses of objects using kilograms and grams</p> | <ul style="list-style-type: none"> ○ Compare two or more objects by mass measured in kilograms and grams, using a set of scales ○ Interpret commonly used fractions of a kilogram, including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$, and relate these to the number of grams ○ Solve problems, including those involving commonly used fractions of a kilogram | |



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| 5 | Multiplication and Division MA2-6NA - uses mental and informal written strategies for multiplication and division | <ul style="list-style-type: none">○ Use mental strategies to divide a two-digit number by a one-digit number where there is no remainder, including:<ul style="list-style-type: none">○ using the inverse relationship of multiplication and division○ using halving and repeated halving to divide by 2, 4 and 8○ using the relationship between division facts○ Use mental strategies and informal recording methods for division with remainders<ul style="list-style-type: none">○ model division, including where the answer involves a remainder, using concrete materials○ explain why a remainder is obtained in answers to some division problems○ use mental strategies to divide a two-digit number by a one-digit number in problems for which answers include a remainder○ record remainders to division problems in words | |
| | 2D Space MA2-15MG manipulates, identifies and sketches two-dimensional shapes, including special quadrilaterals, and describes their features | <ul style="list-style-type: none">○ Combine common two-dimensional shapes, including special quadrilaterals, to form other common shapes or designs○ Split a given shape into two or more common shapes and describe the result | |



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| 6 | Multiplication and Division (1) MA2-6NA - uses mental and informal written strategies for multiplication and division | <ul style="list-style-type: none">○ Apply the inverse relationship of multiplication and division to justify answers○ Record mental strategies used for multiplication and division○ Select and use a variety of mental and informal written strategies to solve multiplication and division problems | |
| | 2D Space MA2-15MG manipulates, identifies and sketches two-dimensional shapes, including special quadrilaterals, and describes their features | <ul style="list-style-type: none">○ Create and describe symmetrical patterns, designs, pictures and shapes○ by translating (sliding), reflecting (flipping) and rotating (turning) one or more common shapes○ Apply and describe amounts of rotation, in both 'clockwise' and 'anti-clockwise' directions, including half-turns, quarter-turns and three-quarter-turns, when creating designs○ Draw the reflection (mirror image) to complete symmetrical pictures and shapes, given a line of symmetry | |
| 7 | Fractions and Decimals MA2-7NA – represents, models and compares commonly used fractions and decimals | <ul style="list-style-type: none">○ State the place value of digits in decimal numbers of up to two decimal places○ Use place value to <u>partition</u> decimals of up to two decimal places○ Model, compare and represent decimals of up to two decimal places | |
| | 3D Space MA2-14MG – makes, compares, sketches and names three-dimensional objects, including prisms, pyramids, cylinders, cones and spheres, and describes their features | <ul style="list-style-type: none">○ Sketch three-dimensional objects from different views, including top, front and side views○ Draw different views of an object constructed from connecting cubes on isometric grid paper | |



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| | | <ul style="list-style-type: none"> ○ Interpret given isometric drawings to make models of three-dimensional objects using connecting cubes | |
| 8 | Fractions and Decimals MA2-7NA – represents, models and compares commonly used fractions and decimals | <ul style="list-style-type: none"> ○ Use a calculator to create patterns involving decimal numbers ○ Place decimals of up to two decimal places on a number line ○ Round a number with one or two decimal places to the nearest whole number | |
| | 3D Space MA2-14MG – makes, compares, sketches and names three-dimensional objects, including prisms, pyramids, cylinders, cones and spheres, and describes their features | <ul style="list-style-type: none"> ○ Sketch three-dimensional objects from different views, including top, front and side views ○ Draw different views of an object constructed from connecting cubes on isometric grid paper ○ Interpret given isometric drawings to make models of three-dimensional objects using connecting cubes | |
| 9 | Addition and Subtraction MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four and five-digit numbers | <ul style="list-style-type: none"> ○ Use a formal written algorithm to record addition and subtraction calculations involving two-, three-, four- and five-digit numbers | REPORTS HOME |
| | Time MA2-13MG – reads and records time in one-minute intervals and converts between hours, minutes and seconds | <ul style="list-style-type: none"> ○ Convert between units of time and recall time facts ○ Record digital time using the correct notation, including am and pm ○ Relate analog notation to digital notation for time | |
| 10 | Addition and Subtraction MA2-5NA – uses mental and written strategies for addition and subtraction involving two-, three-, four and five-digit numbers | <ul style="list-style-type: none"> ○ Find the missing number in a number sentence involving operations of addition or subtraction on both sides of the equals sign ○ Justify solutions when completing number sentences | |



Surveyors Creek PS Mathematics Scope & Sequence Stage Two