



Norris Bank P.S Primary School – Mathematics Scope and Sequence

adapted from Yea P.S

<https://fuse.education.vic.gov.au/MCC>

	TERM 1	TERM 2	TERM 3	TERM 4
Number and Algebra	<p>Counting, Pattern and Order</p> <p>F Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point (VCMNA069)</p> <p>Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond (VCMNA070)</p> <p>Compare, order and make correspondences between collections, initially to 20, and explain reasoning (VCMNA072)</p> <p>Sort and classify familiar objects and explain the basis for these classifications, and copy, continue and create patterns with objects and drawings (VCMNA076)</p> <p>1 Develop confidence with number sequences to and from 100 by ones from any starting point. Skip count by twos, fives and tens starting from zero (VCMNA086)</p> <p>Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line (VCMNA087)</p> <p>Count collections to 100 by partitioning numbers using place value (VCMNA088)</p> <p>Investigate and describe number patterns formed by skip counting and patterns with objects (VCMNA093)</p> <p>Recognise the importance of repetition of a process in solving problems (VCMNA094)</p> <p>2 Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences (VCMNA103)</p> <p>Group, partition and rearrange collections up to 1000 in hundreds, tens and ones to facilitate more efficient counting (VCMNA105)</p>	<p>Addition and Subtraction</p> <p>F Represent practical situations to model addition and subtraction (VCMNA073)</p> <p>Subitise small collections of objects (VCMNA071)</p> <p>Follow a short sequence of instructions (VCMNA077)</p> <p>1 Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089)</p> <p>Recognise and describe one-half as one of two equal parts of a whole (VCMNA091)</p> <p>2 Explore the connection between addition and subtraction (VCMNA106)</p> <p>Solve simple addition and subtraction problems using a range of efficient mental and written strategies (VCMNA107)</p> <p>Recognise and interpret common uses of halves, quarters and eighths of shapes and collections (VCMNA110)</p> <p>Describe patterns with numbers and identify missing elements (VCMNA112)</p> <p>Solve problems by using number sentences for addition or subtraction (VCMNA113)</p> <p>3 Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems (VCMNA131)</p> <p>Recognise and explain the connection between addition and subtraction (VCMNA132)</p>	<p>Multiplication and Division</p> <p>F Represent practical situations to model sharing (VCMNA074)</p> <p>1 Represent practical situations that model sharing (VCMNA090)</p> <p>2 Recognise and represent multiplication as repeated addition, groups and arrays (VCMNA108)</p> <p>Recognise and represent division as grouping into equal sets and solve simple problems using these representations (VCMNA109)</p> <p>Apply repetition in arithmetic operations, including multiplication as repeated addition and division as repeated subtraction (VCMNA114)</p> <p>3 Recall multiplication facts of two, three, five and ten and related division facts (VCMNA134)</p> <p>Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies (VCMNA135)</p> <p>4 Recall multiplication facts up to 10×10 and related division facts (VCMNA155)</p> <p>Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder (VCMNA156)</p> <p>Explore and describe number patterns resulting from performing multiplication (VCMNA161)</p> <p>Solve word problems by using number sentences involving multiplication or division where there is no remainder (VCMNA162)</p>	<p>Money, Fractions, Decimals and Ratios</p> <p>F Represent simple, everyday financial situations involving money (VCMNA075)</p> <p>1 Recognise, describe and order Australian coins according to their value (VCMNA092)</p> <p>Recognise and describe one-half as one of two equal parts of a whole (VCMNA091)</p> <p>2 Count and order small collections of Australian coins and notes according to their value (VCMNA111)</p> <p>Recognise and interpret common uses of halves, quarters and eighths of shapes and collections (VCMNA110)</p> <p>3 Represent money values in multiple ways and count the change required for simple transactions to the nearest five cents (VCMNA137)</p> <p>Model and represent unit fractions including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ and their multiples to a complete whole (VCMNA136)</p> <p>4 Solve problems involving purchases and the calculation of change to the nearest five cents with and without digital technologies (VCMNA160)</p> <p>Investigate equivalent fractions used in contexts (VCMNA157)</p> <p>5 Create simple financial plans (VCMNA191)</p> <p>Follow a mathematical algorithm involving branching and repetition (iteration) (VCMNA194)</p> <p>6 Investigate and calculate percentage discounts of 10%, 25% and 50% on sale items, with and without digital technologies (VCMNA218)</p> <p>7. Investigate and calculate best buys, with and without digital technologies. (VCMNA250)</p>

<p>Number and Algebra</p>	<p>Recognise, model, represent and order numbers to at least 1000 (VCMNA104)</p> <p>3 Investigate the conditions required for a number to be odd or even and identify odd and even numbers (VCMNA129)</p> <p>Recognise, model, represent and order numbers to at least 10 000 (VCMNA130)</p> <p>4 Investigate and use the properties of odd and even numbers (VCMNA151) Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9 (VCMNA154)</p> <p>Recognise, represent and order numbers to at least tens of thousands (VCMNA152)</p> <p>Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation (VCMNA159)</p> <p>Count by quarters, halves and thirds, including with mixed numerals. Locate and represent these fractions on a number line (VCMNA158)</p> <p>5 Recognise, represent and order numbers to at least hundreds of thousands (VCMNA186) Recognise that the place value system can be extended beyond hundredths (VCMNA189) Compare, order and represent decimals (VCMNA190)</p> <p>Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction (VCMNA192)</p> <p>Compare and order common unit fractions and locate and represent them on a number line (VCMNA187)</p> <p>6 Investigate everyday situations that use integers. Locate and represent these numbers on a number line (VCMNA210) Compare fractions with related denominators and locate and represent them on a number line (VCMNA211) Continue and create sequences involving whole numbers, fractions and decimals. Describe the rule used to create the sequence (VCMNA219)</p> <p>7. Compare, order, add and subtract integers (VCMNA241)</p> <p>Compare fractions using equivalence. Locate and represent positive and negative fractions and mixed numbers on a number line. (VCMNA242)</p> <p>Express one quantity as a fraction of another, with and without the use of digital technologies. (VCMNA245)</p> <p>Introduce the concept of variables as a way of representing numbers using letters. (VCMNA251)</p> <p>8. Carry out the four operations with rational numbers and integers, using efficient mental and written strategies and appropriate digital technologies and make estimates for these computations. (VCMNA273)</p>	<p>Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation (VCMNA133)</p> <p>Model and represent unit fractions including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ and their multiples to a complete whole (VCMNA136)</p> <p>Describe, continue, and create number patterns resulting from performing addition or subtraction (VCMNA138)</p> <p>Use a function machine and the inverse machine as a model to apply mathematical rules to numbers or shapes (VCMNA139)</p> <p>4 Apply place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems (VCMNA131)</p> <p>Investigate equivalent fractions used in contexts (VCMNA157)</p> <p>5 Use estimation and rounding to check the reasonableness of answers to calculations (VCMNA182)</p> <p>Use efficient mental and written strategies and apply appropriate digital technologies to solve problems (VCMNA185)</p> <p>Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator (VCMNA188)</p> <p>Use equivalent number sentences involving addition and subtraction to find unknown quantities (VCMNA193)</p> <p>6 Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers and make estimates for these computations (VCMNA209)</p> <p>Solve problems involving addition and subtraction of fractions with the same or related denominators (VCMNA212) Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers (VCMNA214)</p> <p>7. Apply the associative, commutative and distributive laws to aid mental and written computation and make estimates for these computations. (VCMNA240)</p> <p>Round decimals to a specified number of decimal places. (VCMNA246)</p> <p>Solve problems involving addition and subtraction of fractions, including those with unrelated denominators. (VCMNA243)</p> <p>Connect fractions, decimals and percentages and carry out simple conversions. (VCMNA247)</p> <p>Extend and apply the laws and properties of arithmetic to algebraic terms and expressions. (VCMNA253)</p>	<p>Define a simple class of problems and use an effective algorithm that involves a short sequence of steps and decisions to solve them (VCMNA164)</p> <p>5 Solve problems involving division by a one digit number, including those that result in a remainder (VCMNA184)</p> <p>Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies (VCMNA183)</p> <p>Identify and describe factors and multiples of whole numbers and use them to solve problems (VCMNA181)</p> <p>Use estimation and rounding to check the reasonableness of answers to calculations (VCMNA182)</p> <p>Use efficient mental and written strategies and apply appropriate digital technologies to solve problems (VCMNA185)</p> <p>Use equivalent number sentences involving multiplication and division to find unknown quantities (VCMNA163)</p> <p>6 Identify and describe properties of prime, composite, square and triangular numbers (VCMNA208)</p> <p>Multiply decimals by whole numbers and perform divisions by non-zero whole numbers where the results are terminating decimals, with and without digital technologies (VCMNA215)</p> <p>Multiply and divide decimals by powers of 10 (VCMNA216)</p> <p>Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers and make estimates for these computations (VCMNA209)</p> <p>Explore the use of brackets and order of operations to write number sentences (VCMNA220)</p> <p>Design algorithms involving branching and iteration to solve specific classes of mathematical problems. (VCMNA221)</p> <p>7. Investigate index notation and represent whole numbers as products of powers of prime numbers. (VCMNA238)</p> <p>Investigate and use square roots of perfect square numbers. (VCMNA239)</p> <p>Multiply and divide fractions and decimals using efficient written strategies and digital technologies. (VCMNA244)</p> <p>Create algebraic expressions and evaluate them by substituting a given value for each variable. (VCMNA252)</p> <p>8. Simplify algebraic expressions involving the four operations (VCMNA281)</p> <p>Factorise algebraic expressions by identifying numerical factors (VCMNA280)</p> <p>Use index notation with numbers to establish the index laws with positive integral indices and the zero index (VCMNA272)</p> <p>Investigate terminating and recurring decimals (VCMNA274)</p>	<p>Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies. (VCMNA248)</p> <p>Recognise and solve problems involving simple ratios. (VCMNA250)</p> <p>Design and implement mathematical algorithms using a simple general purpose programming language. (VCMNA254)</p> <p>8. Solve problems involving the use of percentages, including percentage increases and decreases and percentage error, with and without digital technologies (VCMNA276)</p> <p>Solve a range of problems involving rates and ratios, including distance-time problems for travel at a constant speed, with and without digital technologies (VCMNA277)</p> <p>Solve problems involving profit and loss, with and without digital technologies (VCMNA278)</p>
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	Use algorithms and related testing procedures to identify and correct errors. (VCMNA282)	8. Extend and apply the distributive law to the expansion of algebraic expressions (VCMNA279)		
Measurement and Geometry	<p>Lines and Linear Measurement</p> <p>F Use direct and indirect comparisons to decide which is longer, and explain reasoning in everyday language (VCMMG078)</p> <p>1 Measure and compare the lengths, of pairs of objects using uniform informal units (VCMMG095)</p> <p>2 Compare and order several shapes and objects based on length, using appropriate uniform informal units (VCMMG115)</p> <p>3 Measure, order and compare objects using familiar metric units of length, area, mass and capacity (VCMMG140)</p> <p>4 Use scaled instruments to measure and compare lengths masses, capacities and temperatures. (VCMMG165)</p> <p>5 Choose appropriate units of measurement for length (VCMMG195)</p> <p>6 Connect decimal representations to the metric system (VCMMG222)</p> <p>Solve problems involving the comparison of lengths using appropriate units (VCMMG224)</p> <p>7. Investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning. (VCMMG265)</p> <p>Classify triangles according to their side and angle properties and describe quadrilaterals. (VCMMG262)</p> <p>8. Develop the conditions for congruence of triangles (VCMMG292)</p>	<p>Time, Angles, Shapes and Perimeter</p> <p>F Compare and order the duration of events using the everyday language of time</p> <p>Connect days of the week to familiar events and actions</p> <p>Sort, describe and name familiar two-dimensional shapes in the environment</p> <p>1 Tell time to the half-hour</p> <p>Describe duration using months, weeks, days and hours</p> <p>Recognise and classify familiar two-dimensional shapes</p> <p>2 Tell time to the quarter-hour, using the language of 'past' and 'to'</p> <p>Describe and draw two-dimensional shapes, with and without digital technologies</p> <p>Investigate the effect of one-step slides and flips with and without digital technologies</p> <p>Identify and describe half and quarter turns</p> <p>3 Tell time to the minute and investigate the relationship between units of time (VCMMG141)</p> <p>Identify symmetry in the environment (VCMMG144)</p> <p>Identify and describe slides and turns found in the natural and built environment (VCMMG145)</p> <p>Identify angles as measures of turn and compare angle sizes in everyday situations (VCMMG146)</p> <p>4 Convert between units of time (VCMMG167)</p> <p>Use am and pm notation and solve simple time problems (VCMMG168)</p> <p>Compare the areas of regular and irregular shapes by informal means (VCMMG169)</p> <p>Compare and describe two dimensional shapes that result from combining and splitting common shapes, with and without the use of digital technologies (VCMMG170)</p> <p>Explain and compare the geometric properties of two-dimensional shapes (VCMMG171)</p>	<p>Location, Area, Volume, 3 Dimensional Shapes</p> <p>F Describe position and movement (VCMMG082)</p> <p>Sort, describe and name familiar three-dimensional objects in the environment (VCMMG081)</p> <p>1 Give and follow directions to familiar locations (VCMMG099)</p> <p>Recognise and classify familiar and three-dimensional objects using obvious features (VCMMG098)</p> <p>2 Interpret simple maps of familiar locations and identify the relative positions of key features (VCMMG122)</p> <p>Name and order months and seasons (VCMMG118)</p> <p>Use a calendar to identify the date and determine the number of days in each month (VCMMG119)</p> <p>Describe the features of three-dimensional objects (VCMMG121)</p> <p>3 Make models of three-dimensional objects and describe key features (VCMMG142)</p> <p>Create and interpret simple grid maps to show position and pathways (VCMMG143)</p> <p>4 Explain and compare the geometric properties of and three-dimensional objects (VCMMG171)</p> <p>Compare objects using familiar metric units of area and volume (VCMMG166)</p> <p>Use simple scales, legends and directions to interpret information contained in basic maps (VCMMG172)</p> <p>5 Calculate the perimeter and area of rectangles and the volume and capacity of prisms using familiar metric units (VCMMG196)</p> <p>Connect three-dimensional objects with their nets and other two-dimensional representations (VCMMG198)</p> <p>Use a grid reference system to describe locations. Describe routes using landmarks and directional language (VCMMG199)</p>	<p>Temperature, Mass and Capacity</p> <p>F Use direct and indirect comparisons to decide which is heavier or holds more, and explain reasoning in everyday language (VCMMG078)</p> <p>1 Measure and compare masses and capacities of pairs of objects using uniform informal units (VCMMG095)</p> <p>2 Compare and order several shapes and objects based on capacity using appropriate uniform informal units</p> <p>Compare masses of objects using balance scales (VCMMG115)</p> <p>3 Measure, order and compare objects using familiar metric units of mass and capacity (VCMMG140)</p> <p>4 Use scaled instruments to measure and compare masses, capacities and temperatures (VCMMG165)</p> <p>5 Choose appropriate units of measurement for, length, are, volume, capacity and mass (VCMMG195)</p> <p>6 Connect volume and capacity and their units of measurement (VCMMG225)</p> <p>Convert between common metric units of length, mass and capacity (VCMMG223)</p> <p>7. Calculate volumes of rectangular prisms (VCMMG259)</p> <p>8. Develop the formulas for volumes of rectangular and triangular prisms and prisms in general. Use formulas to solve problems involving volume (VCMMG289)</p> <p>Explore the variation of means and proportions of random samples drawn from the same population (VCMS299)</p>

Measurement and Geometry		<p>Create symmetrical patterns, pictures and shapes with and without digital technologies (VCMMG173)</p> <p>Compare angles and classify them as equal to, greater than or less than a right angle (VCMMG174)</p> <p>5 Compare 12- and 24-hour time systems and convert between them nets and other two-dimensional representations (VCMMG197)</p> <p>Describe translations, reflections and rotations of two-dimensional shapes. Identify line and rotational symmetries (VCMMG200)</p> <p>Apply the enlargement transformation to familiar two dimensional shapes and explore the properties of the resulting image compared with the original (VCMMG201)</p> <p>Estimate, measure and compare angles using degrees. Construct angles using a protractor (VCMMG202)</p> <p>6 Interpret and use timetables (VCMMG226)</p> <p>Measure, calculate and compare elapsed time (VCMMG227)</p> <p>Investigate the effect of combinations of transformations on simple and composite shapes, including creating tessellations, with and without the use of digital technologies (VCMMG229)</p> <p>Investigate, with and without digital technologies, angles on a straight line, angles at a point and vertically opposite angles. Use results to find unknown angles (VCMMG231)</p> <p>7. Demonstrate that the angle sum of a triangle is 180° and use this to find the angle sum of a quadrilateral. (VCMMG263)</p> <p>Identify corresponding alternate and co-interior angles when two straight lines are crossed by a transversal. (VCMMG264)</p> <p>8. Find perimeters and areas of parallelograms, trapeziums, rhombuses and kites (VCMMG287)</p> <p>Investigate the concept of irrational numbers, including π (VCMNA275)</p> <p>Solve problems involving duration, including using 12 and 24 hour time within a single time zone (VCMMG290)</p> <p>Represent events in two-way tables and Venn diagrams and solve related problems. (VCMSP296)</p> <p>Define congruence of plane shapes using transformations and use transformations of congruent shapes to produce regular patterns in the plane including tessellations with and without the use of digital technology (VCMMG291)</p> <p>Establish properties of quadrilaterals using congruent triangles and angle properties, and solve related numerical problems using reasoning (VCMMG293)</p>	<p>6 Solve problems involving the comparison of areas using appropriate units (VCMMG224)</p> <p>Construct simple prisms and pyramids (VCMMG228)</p> <p>Introduce the Cartesian coordinate system using all four quadrants (VCMMG230)</p> <p>7. Given coordinates, plot points on the Cartesian plane, and find coordinates for a given point (VCMNA255)</p> <p>Establish the formulas for areas of rectangles, triangles and parallelograms and use these in problem solving (VCMMG258)</p> <p>Draw different views of prisms and solids formed from combinations of prisms (VCMMG260)</p> <p>Describe translations, reflections in an axis, and rotations of multiples of 90° on the Cartesian plane using coordinates. Identify line and rotational symmetries. (VCMMG261)</p> <p>8. Choose appropriate units of measurement for area and volume and convert from one unit to another (VCMMG286)</p> <p>Plot linear relationships on the Cartesian plane with and without the use of digital technologies (VCMNA283)</p> <p>Solve linear equations using algebraic and graphical techniques. Verify solutions by substitution (VCMNA284)</p> <p>Investigate the relationship between features of circles such as circumference, area, radius and diameter. Use formulas to solve problems involving determining radius, diameter, circumference and area from each other (VCMMG288)</p>	
Statistics and Probability	<p>Data Collection and Representation (Line and Bar Graphs)</p> <p>F Answer yes/no questions to collect information (VCMSP083)</p>	<p>Data Collection and Representation (Tables and Pie Graphs)</p> <p>F Answer yes/no questions to collect information (VCMSP083)</p>	<p>Data Collection and Representation (Comparison of Displays)</p> <p>F Answer yes/no questions to collect information (VCMSP083)</p>	<p>Data Collection and Representation (Data Manipulation and Analysis)</p> <p>F Answer yes/no questions to collect information (VCMSP083)</p>

<p>Statistics and Probability</p>	<p>Organise answers to yes/no questions into simple data displays using objects and drawings (VCMSPO84)</p> <p>Interpret simple data displays about yes/no questions (VCMSPO85)</p> <p>1 Choose simple questions and gather responses (VCMSPO101)</p> <p>Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays (VCMSPO102)</p> <p>2 Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' (VCMSPO125)</p> <p>Collect, check and classify data (VCMSPO127)</p> <p>3 Interpret and compare data displays (VCMSPO150)</p> <p>Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies (VCMSPO149)</p> <p>4 Describe possible everyday events and order their chances of occurring (VCMSPO175)</p> <p>Identify everyday events where one cannot happen if the other happens (VCMSPO176)</p> <p>Identify events where the chance of one will not be affected by the occurrence of the other (VCMSPO177)</p> <p>Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values (VCMSPO179)</p> <p>5 Recognise that probabilities range from 0 to 1 (VCMSPO204)</p> <p>Pose questions and collect categorical or numerical data by observation or survey (VCMSPO205)</p> <p>Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (VCMSPO206)</p> <p>Describe and interpret different data sets in context (VCMSPO207)</p> <p>6: Construct, interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables (VCMSPO235)</p> <p>Describe probabilities using fractions, decimals and percentages (VCMSPO232)</p>	<p>Organise answers to yes/no questions into simple data displays using objects and drawings (VCMSPO84)</p> <p>Interpret simple data displays about yes/no questions (VCMSPO85)</p> <p>1 Choose simple questions and gather responses (VCMSPO101)</p> <p>Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays (VCMSPO102)</p> <p>2 Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' (VCMSPO125)</p> <p>Collect, check and classify data (VCMSPO127)</p> <p>3 Interpret and compare data displays (VCMSPO150)</p> <p>Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies (VCMSPO149)</p> <p>4 Describe possible everyday events and order their chances of occurring (VCMSPO175)</p> <p>Identify everyday events where one cannot happen if the other happens (VCMSPO176)</p> <p>Identify events where the chance of one will not be affected by the occurrence of the other (VCMSPO177)</p> <p>Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values (VCMSPO179)</p> <p>5 List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions</p> <p>Pose questions and collect categorical or numerical data by observation or survey (VCMSPO205)</p> <p>Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (VCMSPO206)</p> <p>Describe and interpret different data sets in context (VCMSPO207)</p> <p>6: Construct, interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables (VCMSPO235)</p>	<p>Organise answers to yes/no questions into simple data displays using objects and drawings (VCMSPO84)</p> <p>Interpret simple data displays about yes/no questions (VCMSPO85)</p> <p>1 Choose simple questions and gather responses (VCMSPO101)</p> <p>Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays (VCMSPO102)</p> <p>Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen'</p> <p>2 Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' (VCMSPO125)</p> <p>Collect, check and classify data (VCMSPO127)</p> <p>Identify a question of interest based on one categorical variable. Gather data relevant to the question (VCMSPO126)</p> <p>Create displays of data using lists, table and picture graphs and interpret them (VCMSPO128)</p> <p>3 Interpret and compare data displays (VCMSPO150)</p> <p>Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording (VCMSPO148)</p> <p>Conduct chance experiments, identify and describe possible outcomes and recognise variation in results (VCMSPO147)</p> <p>4 Describe possible everyday events and order their chances of occurring (VCMSPO175)</p> <p>Identify everyday events where one cannot happen if the other happens (VCMSPO176)</p> <p>Identify events where the chance of one will not be affected by the occurrence of the other (VCMSPO177)</p> <p>Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values (VCMSPO179)</p> <p>Select and trial methods for data collection, including survey questions and recording sheets (VCMSPO178)</p> <p>Evaluate the effectiveness of different displays in illustrating data features including variability (VCMSPO180)</p>	<p>Organise answers to yes/no questions into simple data displays using objects and drawings (VCMSPO84)</p> <p>Interpret simple data displays about yes/no questions (VCMSPO85)</p> <p>1 Choose simple questions and gather responses (VCMSPO101)</p> <p>Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays (VCMSPO102)</p> <p>2 Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' (VCMSPO125)</p> <p>Collect, check and classify data (VCMSPO127)</p> <p>3 Interpret and compare data displays (VCMSPO150)</p> <p>Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording (VCMSPO148)</p> <p>4 Describe possible everyday events and order their chances of occurring (VCMSPO175)</p> <p>Identify everyday events where one cannot happen if the other happens (VCMSPO176)</p> <p>Identify events where the chance of one will not be affected by the occurrence of the other (VCMSPO177)</p> <p>Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values (VCMSPO179)</p> <p>Select and trial methods for data collection, including survey questions and recording sheets (VCMSPO178)</p> <p>Evaluate the effectiveness of different displays in illustrating data features including variability (VCMSPO180)</p> <p>5 Pose questions and collect categorical or numerical data by observation or survey (VCMSPO205)</p> <p>Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (VCMSPO206)</p> <p>Describe and interpret different data sets in context (VCMSPO207)</p> <p>6: Pose and refine questions to collect categorical or numerical data by observation or survey (VCMSPO237)</p>
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<p>Statistics and Probability</p>	<p>7. Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data (VCMSP270)</p> <p>8. Distinguish between a population and a sample and investigate techniques for collecting data, including census, sampling and observation (VCMSP297)</p> <p>Describe events using language of 'at least', exclusive 'or' (A or B but not both), inclusive 'or' (A or B or both) and 'and' (VCMSP295)</p>	<p>Describe probabilities using fractions, decimals and percentages (VCMSP232)</p> <p>Describe and interpret data displays using median, mean and range (VCMSP271)</p> <p>Construct and compare a range of data displays including stem-and-leaf plots and dot plots (VCMSP271)</p> <p>Solve simple linear equations (VCMNA256)</p>	<p>5 Pose questions and collect categorical or numerical data by observation or survey (VCMSP205)</p> <p>Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (VCMSP206)</p> <p>Describe and interpret different data sets in context (VCMSP207)</p> <p>6: Interpret secondary data presented in digital media and elsewhere (VCMSP236)</p> <p>Pose and refine questions to collect categorical or numerical data by observation or survey (VCMSP237)</p> <p>Describe probabilities using fractions, decimals and percentages (VCMSP232)</p> <p>7. Identify and investigate issues involving numerical data collected from primary and secondary sources (VCMSP268)</p> <p>Investigate, interpret and analyse graphs from real life data, including consideration of domain and range. (VCMNA257)</p> <p>Identify complementary events and use the sum of probabilities to solve problems (VCMSP294)</p> <p>Explore the practicalities and implications of obtaining data through sampling using a variety of investigative processes (VCMSP298)</p>	<p>Describe probabilities using fractions, decimals and percentages (VCMSP232)</p> <p>Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies (VCMSP233)</p> <p>Compare observed frequencies across experiments with expected frequencies (VCMSP234)</p> <p>7. Construct sample spaces for single-step experiments with equally likely outcomes. (VCMSP267)</p>
<p>Rich and Authentic Tasks</p>	<p>Rich and Authentic tasks to be developed and named for students to problem solve using the skills presented. This task becomes the assessment as, of and for learning.</p>			