



Whole School Overview: Mathematics C2C Unit V8- 2021

	Term 1 Unit 1	Term 2 Unit 2	Term 3 Unit 3	Term 4 Unit 4
Prep	<ul style="list-style-type: none"> Number and place value - recalling counting in ones, identifying numbers in the environment, representing quantities, comparing numbers, recalling counting sequences, representing quantities, visualising arrangements to five, matching numerals to quantities, counting forwards and backwards from different starting points, comparing quantities using 'more', 'less', 'same', identifying numbers before, after and next in a sequence, ordering quantities and numerals. Patterns and algebra - identifying how objects are similar or different, sorting objects based on similar features, identifying a rule for a 'sort', identifying questions, identifying patterns in the environment, copying and describing simple patterns, identifying patterns within counting sequences. Using units of measurement - sequencing stages within an activity, comparing duration of events using time language, directly comparing the size of objects, describing the objects. Location and transformation - using positional language to describe location, identifying positional opposites, representing locations with models and images. 	<ul style="list-style-type: none"> Number and place value - count to identify how many; recall forwards and backwards counting sequences; compare quantities; connect number names, numerals and quantities; represent quantities; partition quantities; subitise collections to five. Patterns and algebra - describe repeating patterns, continue repeating patterns, describe repeating patterns using number. Using units of measurement - compare the length of objects using direct comparison, compare the height of objects, describe the thickness and length of objects, compare the length of objects using indirect comparison, compare and order durations, order daily events. Shape - describe lines, describe familiar two-dimensional shapes, compare and sort objects based on shape and function, construct using familiar three-dimensional objects, explore two dimensional shapes. Location and transformation - identify positions, describe movement, give and follow movement directions, explore locations. Data representation and interpretation - use questions to collect information. 	<ul style="list-style-type: none"> Using units of measurement - make direct and indirect comparisons of mass, explain comparisons of mass, sequence familiar events in time order, sequence the days of the week, connect days of the week to familiar events. Number and place value - compare quantities, equalise quantities, combine small collections, represent addition situations, identify parts and the whole, partition quantities flexibly, share collections, identify equal parts of a whole. Patterns and algebra - identify, copy, continue and describe growth patterns, describe equal quantities. Data representation and interpretation - identify questions, answer yes/no questions, use data displays to answer simple questions. 	<ul style="list-style-type: none"> Number and place value - counting forwards and backwards from different starting points, represent quantities, compare quantities, match number names, numerals and quantities, identify parts in a collection, identify addition, join collections, represent addition experiences, make equal groups. Using units of measurement - directly and indirectly compare the mass, length and capacity of objects, directly and indirectly compare the duration of events. Location and transformation - describe position, describe direction.
Assessment	<p>Interview - Grouping familiar objects Students group familiar objects based on common characteristics.</p> <p>Monitoring - Investigating numbers in the environment Students identify numbers in the environment, quantify collections, represent quantities to 10 and compare numbers.</p> <p>Monitoring - Investigating patterns in the environment Students identify patterns in the environment and create sensory patterns.</p> <p>Monitoring - Investigating the size of objects Students compare the size of objects using direct comparison.</p> <p>Monitoring - Matching numerals to quantities Students match numerals to quantities.</p> <p>Monitoring - Ordering of events Students compare and order events using the everyday language of time.</p>	<p>Monitoring - Investigating characteristics of shapes and objects Students group objects based on common characteristics and sort shapes.</p> <p>Monitoring - Investigating language to describe location Students use appropriate language to describe location.</p> <p>Interview - Sorting shapes Students sort shapes.</p> <p>Interview - Understanding numbers from 1 to 20 Students make connections between number names, numerals and quantities up to 10, count to and from 20 and order small collections.</p>	<p>Interview - Answering questions Students answer simple questions to collect information and make simple inferences.</p> <p>Interview - Comparing objects using mass, length and capacity Students compare objects, using mass, length and capacity.</p> <p>Interview - Explaining duration and event sequences Students connect events and days of the week, and explain the order and duration of events.</p> <p>Monitoring - Investigating connections between quantities Students make connections between quantities.</p> <p>Monitoring - Investigating the duration of a week Students connect days of the week to familiar events and activities and represent the duration of a week.</p>	<p>Short answer questions - Identifying numerals Students connect number names, numerals and quantities up to 10 and count to and from 20.</p> <p>Monitoring - Investigating language to describe location Students use appropriate language to describe location.</p> <p>ThinkBoard- Numerals Students connect number names, numerals and quantities up to 10. Measurement assessment from T3 continued</p>
Year 1	<ul style="list-style-type: none"> Number and place value - count numbers, represent the ones counting sequence to and from 100 from any starting point, represent and record the twos counting sequence, represent and order 'teen' numbers, show standard partitioning of teen numbers, flexibly partition teen numbers, describe teen numbers referring to the ten and ones, describe growing patterns, represent two-digit numbers, represent, record and solve simple addition and subtraction problems, investigate parts and whole of quantities, investigate subtraction and explore commutativity. Using units of measurement - sequence days of the week and months of the year, investigate the features and function of calendars, record significant events, compare time durations, investigate length, compare lengths using direct comparisons, make indirect comparisons of length, measure lengths using uniform informal units. Chance - describe the outcomes of familiar events. 	<ul style="list-style-type: none"> Number and place value - represent and record counting sequences, partition two-digit numbers, represent and record the tens number sequence, investigate quantities and equality, represent two-digit numbers, standard partitioning of two-digit numbers, model double facts, identify and describe addition and subtraction situations, apply addition strategies, solve subtraction problems, connect addition and subtraction, represent, record and solve simple addition problems. Fractions and decimals - investigate wholes and halves, partition to make equal parts. Money and financial mathematics - explore features of Australian coins. Patterns and algebra - investigate and describe repeating and growing patterns, connect counting sequences to growing patterns, represent the tens number sequence, represent and record counting sequences, describe number patterns. Using units of measurement - describe the duration of an hour, explore and tell time to the hour. Shape - investigate the features three-dimensional objects and two-dimensional shapes, and describe two-dimensional shapes and three-dimensional objects. Location and transformation - explore and describe location, investigate and describe position, direction and movement, interpret directions. 	<ul style="list-style-type: none"> Number and place value - recall, represent and count collections; position and locate numbers on linear representations; represent and record two-digit numbers; identify digit values; flexibly partition two-digit numbers; partition numbers into more than two parts; add single and two-digit numbers; represent, record and solve simple addition and subtraction problems. Patterns and algebra - recall the ones, twos and tens counting sequences; identify number patterns; represent the fives number sequence. Money and financial mathematics - recognise, describe and order Australian coins according to their value. Using units of measurement - compare and measure lengths using uniform informal units, order objects based on length, explore capacity, measure capacity using uniform informal units, order objects based on capacity, describe duration in time, tell time to the half hour, represent times on digital and analog clocks. Shape - identify and describe familiar two-dimensional shapes, describe geometric features of three-dimensional objects. Location and transformation - give and follow directions; investigate position, direction and movement. 	<ul style="list-style-type: none"> Number and place value - count collections beyond 100; describe patterns created by skip counting; skip count in 1s, 2s, 5s and 10s; identify missing elements; identify standard place value partitions of two-digit numbers; record numerals and number names for two-digit numbers; position and locate two-digit numbers on a number line; partition a number into more than two parts; explain how the order of parts does not affect the total; identify compatible numbers to 10; use compatible numbers to ten to add, describe addition and subtraction processes; use addition facts to solve problems; subtract a multiple of ten from a two-digit number; identify unknown parts in addition and subtraction; solve addition and subtraction problems mental strategies for addition and subtraction problems; recall addition and subtraction number facts. Fractions and decimals - identify one half. Patterns and algebra - describe and represent growing patterns, apply a pattern rule to continue a growing pattern, describe patterns resulting from addition and subtraction, represent addition and subtraction number patterns. Chance - identify the chance of events occurring, predict outcomes of familiar events. Data representation and interpretation - ask suitable questions to collect data, collect and represent data.
Assessment	<p>Written - Classifying outcomes To classify outcomes of simple familiar events.</p> <p>Monitoring - Measuring length using informal units Students order objects based on lengths and capacities using informal units.</p> <p>Monitoring - Representing and solving addition Students carry out simple addition problems using a range of strategies.</p> <p>Written - Understanding teen numbers To recognise, model, write and order numbers to 20, locate numbers on a number line and partition numbers using place value.</p>	<p>Written 2 digit Think board Demonstrate their understanding of numbers in different ways</p> <p>Interview - Describing two-dimensional shapes and three-dimensional objects Students describe two-dimensional shapes and three-dimensional objects.</p> <p>Assignment/Project - Investigating the value of and recognising Australian coins Students use simple strategies to reason and solve a money inquiry question. Students recognise Australian coins according to their value.</p> <p>Observation - Using the language of direction Students give and follow directions to familiar locations.</p> <p>Interview: Adding and Subtracting Students demonstrate their knowledge and understanding of adding and subtracting number strategies.</p>	<p>Short answer questions - Explaining durations and telling time Students explain time durations and tell time to the half hour.</p> <p>Assignment/Project - Investigating the use of language in directions Students use simple strategies to reason and solve location inquiry questions.</p> <p>Practical - Measuring using informal units Students measure and order objects based on length and capacity using informal units.</p> <p>Short answer questions - Understanding number sequences Students describe number sequences resulting from skip counting by twos, fives and tens, count to and from 100 and locate numbers on a number line.</p>	<p>Short answer questions - Adding and subtracting using counting strategies Students carry out simple addition and subtraction.</p> <p>Portfolio - Investigating number facts Students use simple strategies to reason and solve number inquiry questions.</p> <p>Short answer questions - Making inferences from collected data Students collect data by asking questions, draw and describe data displays and make simple inferences.</p> <p>Written 2 digit Think board Demonstrate their understanding of numbers in different ways</p>

Year 2	<ul style="list-style-type: none"> • Number and place value - Count collections in groups of ten; represent two-digit numbers; read and write two-digit numbers; connect two-digit number representations; partition twodigit numbers; use the twos, fives and tens counting sequence; investigate twos, fives and tens number sequences; represent addition and subtraction; use part-part-whole relationships to solve problems; connect part-part-whole understanding to number facts; recall addition number facts; add strings of single-digit numbers; add two-digit numbers; represent multiplication and division; solve simple multiplication and division problems. • Using units of measurement - Order days of the week and months of the year, use calendars to record and plan significant events, connect seasons to the months of the year, compare lengths using direct comparison, compare lengths using indirect comparison, measure and compare lengths using non-standard units. • Chance - Identify everyday events that involve chance; describe chance outcomes; describe events as likely, unlikely, certain, impossible. • Data representation and interpretation - Collect simple data, record data in lists and tables, display data in a picture graph, describe outcomes of data investigations. 	<ul style="list-style-type: none"> • Number and place value - recall addition and subtraction number facts, represent two-digit numbers, partition two-digit numbers into place value parts, represent addition situations, describe part-part-whole relationships, add and subtract single- and two-digit numbers, solve addition and subtraction problems, represent multiplication, represent division, solve simple grouping and sharing problems. • Fractions and decimals - represent halves, quarters and eighths of shapes, describe the connection between halves, quarters and eighths, and solve simple number problems involving halves, quarters and eighths. • Money and financial mathematics - describe the features of Australian coins, count coin collections, identify equivalent combinations, identify \$5 and \$10 notes, count small collections of coins and notes. • Patterns and algebra - identify the threes counting sequence, describe number patterns, identify missing elements in counting patterns, and solve simple number pattern problems. • Using units of measurement - identify the number of days in each month, relate months to seasons, tell time to the quarter hour, compare and order area of shapes and surfaces, cover surfaces to represent area, measure area with informal units. • Shape - recognise and name familiar two-dimensional shapes, describe the features of two-dimensional shapes, draw two-dimensional shapes and describe the features of familiar three-dimensional objects. • Location and transformation - interpret simple maps of familiar locations, describe 'bird's-eye view', use appropriate language to describe locations, use simple maps to identify locations of interest. 	<ul style="list-style-type: none"> • Number and place value - count to and from 1 000, represent three-digit numbers, compare and order three-digit numbers, partition three-digit numbers, read and write three-digit numbers, recall addition number facts, identify related addition and subtraction number facts, add and subtract with two-digit numbers, represent multiplication and division, use multiplication to solve problems and count large collections. • Fractions - divide shapes and collections into halves, quarters and eighths, solve simple fraction problems. • Location and transformation - describe the effect of one-step transformations, including turns, flips and slides, identify turns, flips and slides in real-world situations. • Money and financial mathematics - count collections of coins and notes, make and compare money amounts, read and write money amounts. • Using units of measurement - compare and order objects, measure length, area and capacity using informal units, identify purposes for calendars and explore seasons and calendars. 	<ul style="list-style-type: none"> • Number and place value - recall addition and subtraction number facts, use the inverse relationship, identify compatible numbers, add single-digit and two-digit numbers, add three-digit numbers and subtract two-digit numbers, identify related addition and subtraction facts, use place value to solve addition and subtraction problems. • Fractions and decimals - identify halves, quarter and eighths of shapes and collections. • Patterns and algebra - describe number patterns, investigate addition pattern sequences. • Using units of measurement - directly compare mass of objects; use informal units to measure mass, length, area and capacity of objects and shapes; compare and order objects and shapes based on a single attribute; tell time to the quarter-hour. • Shape - draw and describe two-dimensional shapes, describe the features of three-dimensional objects. • Location and transformation - identify half and quarter turns, represent flips and slides, interpret simple maps. • Chance - predict the likelihood of an event based on data. • Data representation and interpretation - Use data to answer questions, represent data.
	Assessment	<p>Short answer questions - Collecting and representing data Students collect, organise and represent data to make simple inferences.</p> <p>Short answer questions - Counting and calculating to and from 1 000 Students count to and from 1 000 and perform simple addition and subtraction problems using a range of strategies.</p> <p>Monitoring - Counting collections Students count forwards and backwards from various starting points between 1 and 100, count a collection and recall and count using the twos, fives and tens counting sequence.</p> <p>Assignment/Project - Investigating outcomes of daily events Students use simple strategies to reason and solve a chance inquiry question.</p>	<p>Exam/Test - Identifying number patterns and telling time to the quarter hour Students describe number patterns, identify missing elements and tell time to the quarter hour.</p> <p>Observation - Investigating simple maps of familiar locations Students use simple strategies to reason and solve a location inquiry question.</p> <p>Exam/Test - Recognising the value of money and performing simple addition and subtraction calculations Students associate collections of Australian notes and coins with their values. Students solve simple addition and subtraction problems using a range of strategies</p>	<p>Short answer questions - Counting, multiplying and dividing Students count, model and represent numbers to and from 1000 and represent multiplication and division by grouping into sets. Students divide collections and shapes into halves, quarter and eighths and solve simple problems.</p> <p>Assignment/Project - Investigating numbers to 1 000 Students use simple strategies to reason and solve number inquiry questions.</p> <p>Short answer questions - Ordering shapes and objects using informal units Students measure, compare and order several objects using uniform informal units.</p> <p>Short answer questions - Using a calendar to identify dates, months and seasons Students use a calendar to identify dates and the months included in seasons.</p>
Year 2/3		<p>Unit 1 – Year 2 Reading, writing and counting for two digit numbers Counting and ordering number patterns to 100 by 2's, 5's and 10's Nearest 10 Multiplication groups of/ arrays of</p> <p>Measurement Measuring length with informal units</p> <p>Chance and Data Tallies Representing data Graphing</p> <p>Time Days / months / seasons o'clock and half past</p> <p>Unit 1 – Year 3 Reading, writing and counting for three digit numbers Counting and ordering number patterns to 1000 by 2's, 3's, 5's and 10's, 50's 100's. Nearest 100 Multiplication introduce X sign and recall multiplication facts Measurement Measuring length with formal units using centimetres and metres Chance and Data Collecting, collating, displaying and interrupting data Graphing Time o'clock, half past, quarter times and reading clock to five minute intervals</p>	<p>Unit 2 – Year 2 Two digit numbers Partitioning Adding and subtracting 2 digit numbers Rainbow facts Doubles near doubles</p> <p>Investigating odd and even numbers Counting in 10's and 1's – numbers patterns in ascending and descending order Fractions Halves, quarters of an object or group Money Recognising coins and amounts Use coins to represent amounts</p> <p>Shape Recognising polygons Drawing 2D shapes Naming and identifying features of 3D shapes</p> <p>Location and Transformations Interpreting simple maps of similar locations Investigating positions on maps</p> <p>Unit 2 – Year 3 Three digit numbers Partitioning three digit numbers Adding and subtraction three digit numbers with no regrouping</p> <p>Fractions Halves, quarters, thirds of an object or group.</p> <p>Shape Naming and identifying features of 3D shapes Making solid models of 3D shapes Constructing 3D shapes</p> <p>Location and Transformations Investigating positions on maps</p>	

Assessment	Short answer questions – Adjusted C2C Assessment	Short answer questions – Adjusted C2C Assessment		
	Year 3	<ul style="list-style-type: none"> • Number and place value - count to 1 000; investigate the 2s, 3s, 5s and 10s number sequences; identify odd and even numbers; represent three-digit numbers; compare and order three-digit numbers; partition numbers (standard and non-standard place value partitioning); recall addition facts and related subtraction facts; represent and solve addition problems; add two-digit, single-digit and three-digit numbers; subtract two-digit and three-digit numbers; represent multiplication; solve simple problems involving multiplication; recall multiplication number facts. • Using units of measurement - tell time to five-minute intervals; identify one metre as a standard metric unit; represent a metre; measure with metres. • Chance - conduct chance experiments; describe the outcomes of chance experiments; identify variations in the results of chance experiments. • Data representation and interpretation - collect simple data; record data in lists and tables; display data in a column graph; interpret and describe outcomes of data investigations. 	<ul style="list-style-type: none"> • Number and place value - compare and order three-digit numbers, partition three-digit numbers into place value parts, investigate 1 000, count to and beyond 1 000, use place value to add and subtract numbers, recall addition number facts, add and subtract three-digit numbers, add and subtract numbers eight and nine, solve addition and subtraction word problems, double and halve multiples of ten. • Fractions and decimals - describe fractions as equal portions or shares; represent halves, quarters and eighths of shapes and collections; represent thirds of shapes and collections. • Money and financial mathematics - count collections of coins and notes, make and match equivalent combinations, calculate change from simple transactions, solve a range of simple problems involving money. • Patterns and algebra - infer pattern rules from familiar number patterns, identify and continue additive number patterns, identify missing elements in number patterns. • Shape - identify and describe the features of familiar three-dimensional objects, make models of three-dimensional objects. • Location and transformation - represent positions on a simple grid map, show full, half and quarter turns on a grid map, describe positions in relation to key features, represent movement and pathways on a simple grid map. • Geometric reasoning - identify angles in the environment, construct angles with materials, compare the size of familiar angles in everyday situations. 	<ul style="list-style-type: none"> • Number and place value - count and sequences beyond 1 000, represent, combine and partition three-digit and four-digit numbers flexibly, use place value to add (written strategy), represent multiplication as arrays and repeated addition, identify part-part-whole relationships in multiplication and division situations, add and subtract two-digit numbers and three-digit numbers, recall multiplication number facts, identify related division number facts, make models and use number sentences that represent problem situations, recall addition and subtraction facts, identify and describe the relationship between addition and subtraction, choose appropriate mental strategies to add and subtract. • Money and financial mathematics - represent money amounts in different ways, compare values, count collections of coins and notes accurately and efficiently, choose appropriate coins and notes for shopping situations, calculate change and simple totals, • Fractions and decimals - represent and compare unit fractions, represent and compare unit fractions of shapes and collections, represent familiar unit fractions symbolically, solve simple problems involving, halves, thirds, quarters and eighths. • Patterns and algebra - identify number patterns to 10 000, connect number representations with number patterns, use number properties to continue number patterns, identify pattern rules to find missing elements in patterns. • Location and transformation - describe and identify examples of symmetry in the environment, fold shapes and images to show symmetry, classify shapes as symmetrical and nonsymmetrical. • Units of measurement - use familiar metric units to order, compare and measure objects, and measure and record using metric units, explain measurement choices, measure length using part units and centimetres, represent time to the minute on digital and analog clocks, telling time to five minutes and minute, transfer knowledge of time to real-life contexts.
Assessment	<p>Short answer questions - Conducting a simple chance experiment Students collect and interpret data from simple chance experiments.</p> <p>Monitoring- Assignment/Project - Investigating and measuring length Students use simple strategies to reason and solve measurement inquiry questions.</p> <p>Short answer questions - Representing, adding and subtracting numbers Student recognise, represent and order numbers, recognise the connection between addition and subtraction, and add and subtract numbers.</p>	<p>Short answer questions - Adding, subtracting and partitioning numbers Students recall addition and subtraction facts and apply place value understanding to partition, rearrange and regroup numbers.</p> <p>Monitoring - Classifying numbers as odd or even and continuing number patterns Students identify odd and even numbers, justify why a number is odd or even, and to identify, continue and describe number patterns.</p> <p>Assignment/Project - Investigating positions on maps Students use simple strategies to reason and solve a location inquiry question.</p>	<p>Written - Investigating the relationship between units of time Students use simple strategies to reason and solve a measurement inquiry question.</p> <p>Short answer questions - Measuring length, mass and capacity using metric units. Students use metric units to measure and compare length, mass and capacity.</p> <p>Short answer questions - Money (eAssessment) (optional) Students represent money values in various ways and correctly count change from financial transactions.</p> <p>Short answer questions - Patterning and connecting addition and subtraction Students classify numbers as either odd or even, continue number patterns, recall addition facts for single-digit numbers and recognise the connection between addition and subtraction.</p> <p>Assignment/Project - Representing multiplication Students represent multiplication and solve multiplication problems using a range of strategies.</p> <p>Short answer questions - Telling time to the nearest minute Students tell time to the nearest minute and solve problems involving time.</p>	<p>Short answer questions - Interpreting grid maps, and identifying symmetry, three-dimensional objects and angles Students match positions on maps with given information, and identify symmetry in the environment. Students make a model of a three-dimensional object and recognise angles in real situations.</p> <p>Monitoring- Assignment/Project - Investigating change Students use simple strategies to reason and solve money inquiry questions.</p> <p>Short answer questions - Using unit fractions and multiplication Students recall multiplication facts for single-digit numbers, solve problems using efficient strategies for multiplication, and model and represent unit fractions.</p>

Year 4	<ul style="list-style-type: none"> • Number and place value - make connections between representations of numbers; partition and combine numbers flexibly; recall multiplication facts; formulate, model and record authentic situations involving operations; compare large numbers; generalise from number properties and results of calculations; and derive strategies for unfamiliar multiplication and division tasks. • Fractions and decimals - communicate sequences of simple fractions. • Patterns and algebra - use properties of numbers to continue patterns. • Using units of measurement - use appropriate language to communicate times, compare time durations and use instruments to accurately measure lengths. • Chance - compare dependent and independent events, describe probabilities of everyday events. • Data representation and interpretation - collect and record data, communicate information using graphical displays and evaluate the appropriateness of different displays. 	<ul style="list-style-type: none"> • Number and place value - recognise, read and represent five-digit numbers; identify and describe place value in five-digit numbers; partition numbers using standard and non-standard place value parts; compare and order five-digit numbers; identify odd and even numbers; make generalisations about the properties of odd and even numbers; make generalisations about adding, subtracting, multiplying and dividing odd and even numbers; recall 3s, 6s and 9s facts; solve multiplication and division problems; use informal recording methods and strategies for calculations; apply mental and written strategies to computation. • Fractions and decimals - revisit and develop understanding of the proportion and relationships between fractions in the halves family and thirds family, count and represent fractions on number lines, represent fractions using a range of models, solve fraction problems from familiar contexts. • Money and financial mathematics - read and represent money amounts, investigate change, round to five cents, explore strategies to calculate change, solve problems involving purchases and the calculation of change, explore Asian currency and calculate foreign currencies. • Shape - explore properties of polygons and quadrilaterals, identify combined shapes, investigate properties of shapes within tangrams, create polygons and combined shapes using tangrams. • Location and transformation - investigate the features on maps and plans; identify the need for legends; investigate the language of location, direction and movement; find locations using turns and everyday directional language; identify cardinal points of a compass; investigate compass directions on maps; investigate the purpose of scale; apply scale to maps and plans; explore mapping conventions, plan and plot routes on maps; explore appropriate units of measurement and calculate distances using scales. • Geometric reasoning - identify angles, construct and label right angles, identify and construct angles not equal to a right angle, mark angles not equal to a right angle. 	<ul style="list-style-type: none"> • Money and financial mathematics - represent, calculate and round amounts of money required for purchases and change. • Number and place value - interpret number representations; sequence number values; apply number concepts and place value understanding to the calculation of addition, subtraction, multiplication and division; develop fluency with multiplication fact families, apply mental and written computation strategies, recall multiplication and division facts and apply place value to partition and regroup numbers to assist calculations. • Fractions and decimals - partition to create fraction families; identify, model and represent equivalent fractions; count by fractions; solve simple calculations involving fractions with like denominators, model and represent tenths and hundredths, make links between fractions and decimals, count by decimals, compare and sequence decimals. • Location and transformation - investigate different types of symmetry; analyse and create symmetrical designs. • Using units of measurement - use scaled instruments to measure and compare length, mass, capacity and temperature, measure areas using informal units and investigate standard units of measurement. • Shape - compare the areas of regular and irregular shapes using informal units of area measurement. • Patterns and algebra - use equivalent addition and subtraction number sentences to find unknown quantities. 	<ul style="list-style-type: none"> • Number and place value - calculate addition and subtraction using a range of mental and written strategies, recall multiplication and related division facts, calculate multiplication and division using a range of mental and written strategies, solve problems involving the four operations, use estimation and rounding, apply mental strategies, add, subtract, multiply and divide two- and three-digit numbers. • Fractions and decimals - count and identify equivalent fractions, locate fractions on a number line, read and write decimals, identify fractions and corresponding decimals, compare and order decimals (to hundredths). • Money and financial mathematics - calculate change to the nearest five cents, solve problems involving purchases. • Patterns and algebra - use equivalent multiplication and division number sentences to find unknown quantities. • Using units of measurement - use am and pm notation, solve simple time problems. • Shape - measure area of shapes, compare the areas of regular and irregular shapes by informal means. • Data representation and interpretation - write questions to collect data, collect and record data, display and interpret data.
Assessment	<p>Short answer questions - Identifying and explaining chance events Students identify dependent and independent events and explain the chance of everyday events occurring.</p> <p>Short answer questions - Using the properties of odd and even numbers Students use the relationships between the four operations and odd and even numbers.</p> <p>Monitoring - Understanding place value, fractions and operations Students demonstrate understanding of place value, operations and fractions.</p> <p>Short answer questions - Investigating time Students use simple strategies to reason and solve a measurement inquiry question.</p>	<p>Short answer questions - Recalling multiplication and division facts, interpreting simple maps and classifying angles Students recall multiplication and division facts, interpret information contained in simple maps and classify angles in relation to a right angle.</p> <p>Short answer questions - Recalling and using multiplication and division facts Students recall multiplication and division facts, identify and explain unknown quantities and solve problems using appropriate strategies for multiplication and division.</p>	<p>Short answer questions - Comparing areas and using measurements Students compare areas of regular and irregular shapes using informal units. Students use scaled instruments to measure temperature, mass, capacity and length. Students recall multiplication and division facts.</p> <p>Short answer questions - Recognising and locating fractions Students locate familiar fractions on a number line and recognise common equivalent fractions in familiar contexts.</p>	<p>Short answer questions - Analysing data Students define the different methods for data collection and representation, and evaluate their effectiveness. Students construct data displays from given or collected data.</p> <p>Short answer questions - Connecting decimals and fractions Students demonstrate and explain the connections between fractions and decimals to hundredths.</p> <p>Short answer questions - Solving purchasing problems Students solve simple purchasing problems including the calculation of change.</p>

4/5D	Year 4	Year 4	Year 4	Year 4
	<p>Number and place value - recognise, read and represent five-digit numbers; identify and describe place value in five-digit numbers; partition numbers using standard and non-standard place value parts; compare and order five-digit numbers; identify odd and even numbers; make generalisations about the properties of odd and even numbers; make generalisations about adding, subtracting, multiplying and dividing odd and even numbers; recall 3s, 6s and 9s facts; solve multiplication and division problems; use informal recording methods and strategies for calculations; apply mental and written strategies to computation.</p> <p>• Fractions and decimals - revisit and develop understanding of the proportion and relationships between fractions in the halves family and thirds family, count and represent fractions on number lines, represent fractions using a range of models, solve fraction problems from familiar contexts.</p> <p>Chance - compare dependent and independent events, describe probabilities of everyday events.</p>	<ul style="list-style-type: none"> • Shape — explore properties of polygons and quadrilaterals, identify combined shapes, investigate properties of shapes within tangrams, create polygons and combined shapes using tangrams. • Location and transformation — investigate the features on maps and plans, identify the need for legends, investigate the language of location, direction and movement, find locations using turns and everyday directional language, identify cardinal points of a compass, investigate compass directions on maps, investigate the purpose of scale, apply scale to maps and plans, explore mapping conventions, plan and plot routes on maps, explore appropriate units of measurement and calculate distances using scales. • Geometric reasoning — identify angles, construct and label right angles, identify and construct angles not equal to a right angle, mark angles not equal to a right angle. • Number and place value — make connections between representations of numbers, partition and combine numbers flexibly, recall multiplication facts, formulate, model and record authentic situations involving operations, compare large numbers, generalise from number properties and results of calculations, derive strategies for unfamiliar multiplication and division tasks • Location and transformation — investigate different types of symmetry, analyse and create symmetrical designs. 	<ul style="list-style-type: none"> • Number and place value — interpret number representations, sequence number values, apply number concepts and place value understanding to the calculation of addition, subtraction, multiplication and division, develop fluency with multiplication fact families., apply mental and written computation strategies, recall multiplication and division facts and apply place value to partition and regroup numbers to assist calculations. • Fractions and decimals — partition to create fraction families, identify, model and represent equivalent fractions, count by fractions, solve simple calculations involving fractions with like denominators, model and represent tenths and hundredths, make links between fractions and decimals, count by decimals, compare and sequence decimals. • Money and financial mathematics — represent, calculate and round amounts of money required for purchases and change. • Using units of measurement — use scaled instruments to measure and compare length, mass, capacity and temperature, measure areas using informal units and investigate standard units of measurement. • Money and financial mathematics — read and represent money amounts, investigate change, rounding to five cents, explore strategies to calculate change, solve problems involving purchases and the calculation of change, explore Asian currency and calculate foreign currencies. 	<ul style="list-style-type: none"> • Number and place value — calculate addition and subtraction using a range of mental and written strategies, recall multiplication and related division facts, calculate multiplication and division using a range of mental and written strategies, solve problems involving the four operations, use estimation and rounding, apply mental strategies, add, subtract, multiply and divide two- and three-digit numbers. • Money and financial mathematics — calculate change to the nearest five cents, solve problems involving purchases. • Using units of measurement — use am and pm notation, solve simple time problems. • Using units of measurement — use appropriate language to communicate times, compare time durations and use instruments to accurately measure lengths. • Data representation and interpretation — write questions to collect data, collect and record data, display and interpret data. • Data representation and interpretation — collect and record data, communicate information using graphical displays and evaluate the appropriateness of different displays.
	Year 5	Year 5	Year 5	Year 5
	<ul style="list-style-type: none"> • Number and place value — round and estimate to check the reasonableness of answers, explore and apply mental computation strategies for multiplication and division, solve multiplication and division problems with no remainders, solve problems using mental computation strategies and informal recording methods, compare and evaluate strategies that are appropriate to different problems • Number and place value — round and estimate to check if an answer is reasonable, use written strategies to add and subtract, use an array to multiply one- and two-digit numbers, use divisibility rules to divide, solve problems involving computation and apply computation to money problems, adds and subtracts using mental and written strategies including the right-to-left strategy, multiplies whole numbers and divides by a one-digit whole number with and without remainders. • Number and place value — apply mental and written strategies to solve addition, subtraction, multiplication and division problems, identify and use factors and multiples, apply computation skills, use estimation and rounding to check reasonableness, solve problems involving addition, subtraction, multiplication and division, use efficient mental and written strategies to solve problems. • Fractions and decimals — make connections between fractional numbers and the place value system and represent, compare and order decimals. • Fractions and decimals — apply decimal skills, recognise that the place value system can be extended beyond hundredths, compare order and represent decimals, locate decimals on a number line, extend the number system to thousandths and beyond. • Chance — identify and describe possible outcomes, describe equally likely outcomes, represent probabilities of outcomes using fractions, conduct a chance experiment and investigate the fairness of a game. Chance — list possible outcomes of chance experiments, describe and order chance events, express probability on a numerical continuum, compare predictions with actual data, apply probability to games of chance, make predictions in chance experiments. 	<ul style="list-style-type: none"> • Number and place value — apply mental and written strategies to solve addition, subtraction, multiplication and division problems, identify and use factors and multiples, apply computation skills, use estimation and rounding to check reasonableness, solve problems involving addition, subtraction, multiplication and division, use efficient mental and written strategies to solve problems. • Location and transformation — investigate and create reflection and rotation symmetry, describe and create transformations using symmetry, transform shapes through enlargement and describe the features of transformed shapes. • Geometric reasoning — identify the components of angles, compare & estimate the size of angles to establish benchmarks, construct & measure angles. • Location and transformation — explore mapping conventions, interpret simple maps, use alphanumeric grids to locate landmarks and plot points, describe symmetry, create symmetrical designs & enlarge shapes. • Shape — apply the properties of 3D objects to make connections with a variety of two-dimensional representations of 3D objects, represent 3D objects with 2D representations • Location and transformation — explore maps and grids, use a grid to describe locations, describe positions using landmarks and directional language. • Geometric reasoning — estimate and measure angles, construct angles using a protractor. 	<ul style="list-style-type: none"> • Fractions and decimals — makes connections between fractions and decimals, compares and orders decimals. • Fractions and decimals — use models to represent fractions, count on and count back using unit fractions, identify and compare unit fractions and solve problems using unit fractions, add and subtract simple fractions with the same denominator. <p>Money and financial mathematics — investigate income and expenditure, calculate costs, investigate savings and spending plans, develop and explain simple financial plans.</p> <ul style="list-style-type: none"> • Data representation and interpretation — explore methods of data representations to construct & interpret data displays, reason with data. • Data representation and interpretation — explore types of data, investigate an issue (design data-collection questions and tools, collect data, represent as a column graph or dot plot, interpret and describe data to draw a conclusion). 	<ul style="list-style-type: none"> • Patterns and algebra — create and continue patterns involving whole numbers, fractions and decimals, explore strategies to find unknown quantities. • Patterns and algebra — creates, continues and identifies the rule for patterns involving the addition and subtraction of fractions, use number sentences to find unknown quantities involving multiplication and division • Number and place value — round and estimate to check the reasonableness of answers, explore and apply mental computation strategies for multiplication and division, solve multiplication and division problems with no remainders, solve problems using mental computation strategies and informal recording methods, compare and evaluate strategies that are appropriate to different problems • Number and place value — round and estimate to check if an answer is reasonable, use written strategies to add and subtract, use an array to multiply one- and two-digit numbers, use divisibility rules to divide, solve problems involving computation and apply computation to money problems, adds and subtracts using mental and written strategies including the right-to-left strategy, multiplies whole numbers and divides by a one-digit whole number with and without remainders. • Number and place value — apply mental and written strategies to solve addition, subtraction, multiplication and division problems, identify and use factors and multiples, apply computation skills, use estimation and rounding to check reasonableness, solve problems involving addition, subtraction, multiplication and division, use efficient mental and written strategies to solve problems.
	Year 5	Year 5	Year 5	Year 5

Assessment	<p>Year 4</p> <p>Short answer questions - Using the properties of odd and even numbers Students use the relationships between the four operations and odd and even numbers.</p> <p>Short answer questions - Connecting decimals and fractions Students demonstrate and explain the connections between fractions and decimals to hundredths.</p> <p>Short answer questions - Identifying and explaining chance events Students identify dependent and independent events and explain the chance of everyday events occurring.</p> <p>Year 5 Place value : Students locate, represent and order numbers in decimals and to hundred thousands</p> <p>Decimals : Recognise that the place value system can be extended beyond hundredths, compare, order and represent decimals.</p> <p>Solving simple multiplication, division and fraction problems <i>Short answer questions</i></p> <p>Students solve multiplication and division problems by efficiently and accurately applying a range of strategies, checking the reasonableness of answers using estimation and rounding. They locate, represent, compare and order fractions and add and subtract fractions with the same denominator.</p> <p>Describing chance and probability <i>Short answer questions</i></p> <p>Students mathematically describe chance experiments involving equally likely outcomes and represent those outcomes.</p>	<p>Year 4 Recalling multiplication and division facts, interpreting simple maps and classifying angles <i>Short answer questions</i></p> <p>Students recall multiplication and division facts, interpret information contained in simple maps and classify angles in relation to a right angle .Interpret symmetrical patterns</p> <p>Investigating distance on maps to reason and solve a location inquiry question.</p> <p>Recalling and using multiplication and division facts <i>Short answer questions</i></p> <p>Students recall multiplication and division facts, identify unknown quantities and solve problems using appropriate strategies for multiplication and division</p> <p>Year 5 Applying shape, angle and transformation concepts : Generation Geometry Written</p> <p>Students measure and construct angles, make connections between three-dimensional objects and their two-dimensional representation. Students describe the symmetry and transformation of two-dimensional shapes and identify line and rotational symmetry. Students recognise transformation needed in relation to objects on a map and apply knowledge of the grid referencing system.</p> <p>Calculating time and identifying factors and multiples <i>Short answer questions</i></p> <p>Students convert between 12 and 24-hour time. They identify and describe factors and multiples of whole numbers.</p>	<p>Year 4 Recognising and locating fractions <i>Short answer questions</i></p> <p>Students locate familiar fractions on a number line and recognise common equivalent fractions in familiar contexts.</p> <p>Comparing areas and using measurement <i>Short answer questions</i></p> <p>Students compare areas of regular and compare areas of regular and irregular shapes using informal units. Students use scaled instruments to measure temperature, mass, capacity and length. Students recall multiplication and division facts.</p> <p>Solving addition and subtraction problems with a think mat: Students choose appropriate problem solving strategies to efficiently and accurately solve problems.</p> <p>Year 5 Calculating measurements: The great Garden <i>Short answer questions</i></p> <p>Students choose appropriate units of measurement for length, area, volume, capacity and mass. They calculate perimeter and area of rectangles.</p> <p>Investigating data Digging into data</p> <p>Students classify and interpret data and pose questions to gather data</p> <p>Continuing patterns, calculating with money and numbers: Eggsellent idea <i>Short answer questions</i></p> <p>Students continue patterns by adding and subtracting fractions and decimals and identify and explain strategies for finding unknown quantities in number sentences involving the four operations. They apply a range of computation strategies to solve money problems and to plan and calculate simple budgets.</p> <p>Multiplication, division and fractions assessment</p> <p>Students solve multiplication and division problems by efficiently and accurately applying a range of strategies, checking the reasonableness of answers using estimation and rounding. They locate, represent, compare and order fractions and add and subtract fractions with</p>	<p>Year 4 Analysing data <i>Short answer questions</i></p> <p>Students define the different methods for data collection and representation and evaluate their effectiveness. They construct data displays from given or collected data.</p> <p>Time: Students convert between units of time</p> <p>Solving purchasing problems <i>Short answer questions</i></p> <p>Students solve simple purchasing problems including the calculation of change.</p> <p>Investigating number: Students decipher and construct number sequences with single digits and describe number patterns from repeated multiplication</p> <p>Year 5 Perfecting patterns</p> <p>Students continue patterns by adding and subtracting whole numbers, fractions and decimals, and find unknown quantities in number sentences.</p> <p>Solving addition and subtraction problems with think mat</p> <p>Students choose appropriate problem solving strategies to efficiently and accurately solve problems.</p> <p>Factors and multiples</p> <p>Students identify and write factors and multiples of whole numbers and explain characteristics of factors and multiples. Students use factors and multiples to solve problems.</p>
	<p>Year 5</p> <p>• Number and place value - make connections between factors and multiples, identify numbers that have 2, 3, 5 or 10 as factors, represent multiplication using the split and compensate strategy, choose appropriate procedures to represent the split and compensate strategy of multiplication, use a written strategy for addition and subtraction, round and estimate to check the reasonableness of answers, explore mental computation strategies for division, solve problems using mental computation strategies and informal recording methods, compare and evaluate strategies that are appropriate to different problems, make generalisations.</p> <p>• Fractions and decimals - use models to represent fractions, count on and count back using unit fractions, identify and compare unit fractions using a range of representations and solve problems using unit fractions. Add and subtract simple fractions with the same denominator.</p> <p>• Using units of measurement - investigate time concepts and the measurement of time, read and represent 24-hour time, measure dimensions, estimate and measure the perimeters of rectangles, investigate metric units of area measurement, estimate and calculate area of rectangles.</p> <p>• Chance - identify and describe possible outcomes, describe equally likely outcomes, represent probabilities of outcomes using fractions, conduct a chance experiment and apply understandings of probability and data collection to investigate the fairness of a game.</p> <p>• Data representation and interpretation - build an understanding of data, develop the skill of defining numerical and categorical data, generate sample questions, explain why data is either numerical or categorical, develop an understanding of why data is collected, choose appropriate methods to record data, interpret data, generalise by composing summary statements about data.</p>	<p>• Number and place value - round and estimate to check the reasonableness of answers, explore and apply mental computation strategies for multiplication and division, solve multiplication and division problems with no remainders, solve problems using mental computation strategies and informal recording methods, compare and evaluate strategies that are appropriate to different problems and explore and identify factors and multiples.</p> <p>• Fractions and decimals - make connections between fractional numbers and the place value system; and represent, compare and order decimals</p> <p>• Patterns and algebra - create and continue patterns involving whole numbers, fractions and decimals; explore strategies to find unknown quantities.</p> <p>• Shape - apply the properties of three-dimensional objects to make connections with a variety of two-dimensional representations of three-dimensional objects, represent three dimensional objects with two-dimensional representations.</p> <p>• Location and transformation - investigate and create reflection and rotation symmetry, describe and create transformations using symmetry, transform shapes through enlargement and describe the features of transformed shapes.</p> <p>• Geometric reasoning - identify the components of angles, compare and estimate the size of angles to establish benchmarks, construct and measure angles.</p> <p>• Data representation and interpretation - explore methods of data representations to construct and interpret data displays, reason with data.</p>	<p>• Number and place value - round and estimate to check an answer is reasonable, use written strategies to add and subtract, use an array to multiply one-digit and two-digit numbers, use divisibility rules to divide, solve problems involving computation and apply computation to money problems, add and subtract using mental and written strategies including the right-to-left strategy, multiply whole numbers and divide by a one-digit whole number with and without remainders.</p> <p>• Fractions and decimals - make connections between fractions and decimals, compare and order decimals.</p> <p>• Money and financial mathematics - investigate income and expenditure, calculate costs, investigate savings and spending plans, develop and explain simple financial plans.</p> <p>• Patterns and algebra - create, continue and identify the rule for patterns involving the addition and subtraction of fractions; use number sentences to find unknown quantities involving multiplication and division.</p> <p>• Using units of measurement - choose appropriate units for length, area, capacity and mass; measure length, area, capacity and mass; problem-solve and reason when applying measurement to answer a question.</p> <p>• Location and transformation - explore mapping conventions, interpret simple maps, use alphanumeric grids to locate landmarks and plot points, describe symmetry, create symmetrical designs and enlarge shapes. For further information to support teaching</p>	<p>• Number and place value - apply mental and written strategies to solve addition, subtraction, multiplication and division problems; identify and use factors and multiples; apply computation skills; use estimation and rounding to check reasonableness; solve problems involving addition, subtraction, multiplication and division; use efficient mental and written strategies to solve problems.</p> <p>• Fractions and decimals - apply decimal skills, recognise that the place value system can be extended beyond hundredths, compare order and represent decimals, locate decimals on a number line, extend the number system to thousandths and beyond.</p> <p>• Money and financial mathematics - create simple budgets, calculate with money, identify the GST component of invoices and receipts, make financial decisions.</p> <p>• Using units of measurement - read and represent 24-hour time, convert between 12-hour and 24-hour time.</p> <p>• Location and transformation - explore maps and grids, use a grid to locate and describe locations, describe positions using landmarks and directional language.</p> <p>• Geometric reasoning - estimate and measure angles, construct angles using a protractor.</p> <p>• Chance - list possible outcomes of chance experiments, describe and order chance events, express probability on a numerical continuum, compare predictions with actual data, apply probability to games of chance, make predictions in chance experiments.</p> <p>• Data representation and interpretation - explore types</p>

Assessment	<p>Monitoring - Converting between 12 and 24 hour time Students convert between 12 and 24 hour time.</p> <p>Monitoring - Finding the area of rectangles Students choose appropriate units and find the area of rectangles.</p> <p>Monitoring - Finding the perimeter of rectangles Students choose appropriate units and find the perimeter of rectangles.</p> <p>Written - Interpreting data and posing questions to collect data To classify and interpret data and pose questions to gather data.</p> <p>Assignment/Project - Investigating chance experiments To use simple strategies to reason and solve chance inquiry questions.</p> <p>Short answer questions - Solving simple multiplication, division and fraction problems To solve multiplication and division problems by efficiently and accurately applying a range of strategies, checking the reasonableness of answers using estimation and rounding. To locate, represent, compare and order fractions and add and subtract fractions with the same denominator.</p>	<p>Written - Applying shape, angle and transformation concepts Students measure and construct angles, and make connections between three-dimensional objects and their two dimensional representations. Students describe the symmetry and transformation of two-dimensional shapes, and identify line and rotational symmetry.</p> <p>Monitoring - Connecting 3D objects with their 2D representations Students connect 3D objects with their 2D representations.</p> <p>Monitoring - Identifying and describing factors and multiples Students identify and describe line and rotation symmetry.</p> <p>Monitoring - Identifying and describing line and rotational symmetry Students identify and describe line and rotational symmetry.</p> <p>Assignment/Project - Investigating involving data Students use simple strategies to reason and solve data inquiry questions.</p> <p>Monitoring - Ordering and locating decimals on number lines Students represent, locate and order decimals to and beyond hundredths.</p> <p>Monitoring - Solving simple problems involving the four operations Students solve simple problems involving the four operations using a range of strategies. They check for reasonableness of answers using estimation and rounding.</p>	<p>Short answer questions - Calculating measurements Students choose appropriate units of measurement for length, area, volume, capacity and mass. Students calculate perimeter and area of rectangles.</p> <p>Short answer questions - Continuing patterns, calculating with money and numbers Students continue patterns by adding and subtracting fractions and decimals, and identify and explain strategies for finding unknown quantities in number sentences involving the four operations. Students apply a range of computation strategies to solve problems and to plan and calculate simple budgets.</p> <p>Monitoring - Explaining simple budgets Students explain plans for simple budgets.</p> <p>Assignment/Project - Investigating and calculating measurement Students use simple strategies to reason and solve a measurement inquiry question.</p> <p>Monitoring - Locating and calculating fractions Students order decimals and unit fractions and locate them on number lines. They add and subtract fractions with the same denominator. Students continue patterns by adding and subtracting fractions and decimals.</p> <p>Monitoring - Locating landmarks Students use a grid reference system to locate landmarks.</p>	<p>Short answer questions - Calculating time and identifying factors and multiples Students convert between 12-hour and 24-hour time. Students identify and describe factors and multiples of whole numbers.</p> <p>Short answer questions - Describing chance and probability Students mathematically describe chance experiments involving equally likely outcomes and to represent those outcomes.</p> <p>Assignment/Project - Investigating with measurement and mapping Students use simple strategies to reason and solve measurement and location inquiry questions.</p>
	<p>• Number and place value - Identify and describe properties of prime and composite numbers, and select and apply mental and written strategies to problems involving all four operations.</p> <p>• Fractions and decimals - Order and compare fractions with related denominators, add and subtract fractions with related denominators, calculate the fraction of a given quantity, and solve problems involving the addition and subtraction of fractions.</p> <p>• Chance - Represent the probability of outcomes as a fraction or decimal and conduct chance experiments.</p> <p>• Money and financial mathematics - investigate and calculate percentage discounts of 10%, 25% and 50% on sale items.</p> <p>• Using units of measurement - solve problems involving the comparison of lengths and areas, and interpret and use timetables.</p> <p>• Data representation and interpretation - Revise different types of data displays, interpret data displays, investigate the similarities and differences between different data displays, identify the purpose and use of different displays, and identify the difference between categorical and numerical data.</p>	<p>• Number and place value - select and apply mental and written strategies and digital technologies to solve problems involving multiplication and division with whole numbers, and identify, describe and continue square and triangular numbers.</p> <p>• Fractions and decimals - apply mental and written strategies to add and subtract decimals, solve problems involving decimals, make generalisations about multiplying whole numbers and decimals by 10, 100 and 1 000, apply mental and written strategies to multiply decimals by one-digit whole numbers, and locate, order and compare fractions with related denominators and locate them on a number line.</p> <p>• Patterns and algebra - continue and create sequences involving whole numbers and decimals, describe the rule used to create these sequences and explore the use of order of operations to perform calculations.</p> <p>• Using units of measurement - make connections between volume and capacity.</p> <p>• Shape - problem-solve and reason to create nets and construct models of simple prisms and pyramids.</p> <p>• Geometric reasoning - make generalisations about angles on a straight line, angles at a point and vertically opposite angles, and use these generalisations to find unknown angles.</p>	<p>• Money and financial mathematics - Connect fractions and percentage, calculate percentages and discounts, calculate discounts of 10%, 25% and 50% on sale items.</p> <p>• Number and place value - Identify and describe properties of prime, composite, square and triangular numbers, multiply and divide using written methods including a standard algorithm, solve problems involving all four operations with whole numbers, locating and representing positive and negative integers and solving problems involving integers.</p> <p>• Location and transformation - Identify the four quadrants on a Cartesian plane, plot and locate ordered pairs in all four quadrants, applying one-step transformation and describe the effect of combinations of translations, reflections and rotations.</p> <p>• Patterns and algebra - Create and complete sequences involving fractions and decimals, describe the rule used to create the sequence and apply the order of operations to aid calculations when solving problems.</p> <p>• Fractions and decimals - Add and subtract fractions with related denominators, calculate a fraction of a quantity, multiply and divide decimals by powers of ten, add and subtract decimals, multiply decimals by whole numbers, divide numbers that result in tenths and hundredths and solve problems involving fractions and decimals.</p> <p>• Using units of measurement - Connect decimals to the metric system, convert between units of measure, comparing length and solve problems involving length and area and connect volume and capacity.</p>	<p>• Fractions and decimals - add, subtract and multiply decimals; divide decimals by whole numbers; calculate a fraction of a quantity and percentage discount; compare and evaluate shopping options.</p> <p>• Patterns and algebra and Number and place value - represent number patterns in a table and graphically, use rules to continue patterns, write a rule to describe a pattern, apply the rule to find the value of unknown terms, solve integer problems, plot coordinates in all four quadrants, solve problems using the order of operations, and solve multiplication and division problems using a written algorithm.</p> <p>• Using units of measurement - Interpret and use timetables</p> <p>• Location and transformation - apply translations, reflections and rotations to create symmetrical shapes.</p> <p>• Geometric reasoning - measure and describe angles, apply generalisations about angles on a straight line, angles at a point and vertically opposite angles and apply in real-life contexts.</p> <p>• Chance - conduct chance experiments; record data in a frequency table; calculate relative frequency; write probability as a fraction, decimal or per cent; compare observed and expected frequencies.</p> <p>• Data representation and interpretation - compare primary and secondary data, source secondary data, explore data displays in the media, identify how displays can be misleading, represent data from a chance experiment, problem solve and reason by interpreting secondary data.</p>
	<p>Short answer questions - Interpreting and comparing data displays To interpret, compare and analyse data displays to make decisions.</p> <p>Short answer questions - Interpreting and using timetables To interpret and use timetables and cost information to determine a travel schedule.</p>	<p>Short answer questions - Applying the order of operations Students write and apply the correct use of brackets and order of operations in number sentences.</p> <p>Short answer questions - Investigating angles Students solve problems using the relationships between angles on a straight line, vertically opposite angles and angles at a point.</p> <p>Assignment/Project - Investigating pyramids and measurement Students use simple strategies to reason and solve a shape and measurement inquiry question.</p>	<p>Short answer questions - Calculating fractions and decimals Students locate fractions on a number line, solve problems involving the addition and subtraction of related fractions, calculate a simple fraction of a quantity and describe rules for sequences involving fractions and decimals. Students perform calculations on decimals including multiplying and dividing by powers of 10 and make connections between capacity and volume.</p> <p>Short answer questions - Identifying number properties and calculating percentage discounts Students recognise the properties of prime, composite, square and triangular numbers, solve problems involving division and multiplication, calculate common percentage discounts on sale items and connect fractions, decimals and percentages as different representations of the same number.</p> <p>Short answer questions - Locating integers and describing transformations Students describe the use of integers in everyday contexts, locate integers on a number line, locate an ordered pair in any one of the four quadrants on the Cartesian plane and describe combinations of transformations</p> <p>Short answer questions - Describing number patterns and rules Students describe, create and continue number patterns involving whole and decimal numbers.</p> <p>Short answer questions - Describing integers in everyday contexts Students demonstrate understanding of positive and negative numbers and their position on a number line.</p>	<p>Short answer exam - Describing probabilities and comparing frequencies Students compare observed and expected frequencies and write probabilities using simple fractions, decimals and percentages.</p> <p>Assignment/Project - Investigating and interpreting secondary data Students use simple strategies to reason and solve a data inquiry question.</p> <p>Assignment/Project - Investigating and solving problems involving measurement and data Students use simple strategies to reason and solve a data and measurement inquiry question.</p> <p>Monitoring - Location and transformation: Creating a logo or crest Students describe combinations of transformations.</p> <p>Monitoring - Uncle Charles's dilemma Students describe rules used in sequences involving whole numbers, fractions and decimals.</p>

