Whole School Overview: Mathematics Unit V9 – 2026

Composite classes will follow both year level plans

	Term 1 Unit 1	Term 2 Unit 2	Term 3 Unit 3	Term 4 Unit 4
Prep	As students continue to develop their proficiency and positive attitudes towards mathematics and its applications, they: • use physical and virtual materials to look for and make connections between number names, numerals and quantities • learn to recognise repetition in pattern sequences and apply this to creatively build repeating patterns in a range of contexts • develop a sense of sameness, difference and change when engaging in play-based activities about patterns • develop a sense of sameness, difference and change when engaging in play-based activities describing position and location • bring mathematical meaning to the use of familiar terms and language when they pose and respond to questions, and explain their thinking and reasoning • explore situations, sparked by curiosity, using physical and virtual materials to represent, collect, sort, quantify and compare data.	Students further develop proficiency with positive dispositions towards mathematics and its use as they: • look for and make connections between number names, numerals and quantities, and use subitising and counting strategies to quantify collections and compare quantities, using mathematical reasoning in active learning experiences • explore situations, sparked by curiosity, using physical and virtual materials to combine by adding to at least 10, equally share and solve these as everyday problems • build confidence and autonomy in being able to make and justify mathematical decisions based on quantification and direct comparisons of duration and events.	Students further develop proficiency and positive dispositions towards mathematics and its use as they: • build on understanding to make connections between number names, numerals and quantities, and partition and combine collections • explore situations, sparked by curiosity, using physical and virtual materials to represent and solve everyday problems that involve quantifying, adding to and taking away from collections to at least 20 • build confidence and autonomy in being able to make and justify mathematical decisions based on quantification and direct comparisons of mass, capacity and length of objects and duration	Students further develop proficiency and positive dispositions towards mathematics and its use as they: • look for and make connections between number names, numerals and quantities, compare quantities to at least 20 using mathematical reasoning in active learning experiences • explore situations, sparked by curiosity, using physical and virtual materials to represent, partition and solve everyday problems • build confidence and autonomy in being able to make and justify mathematical decisions based on quantification • name, create and compare shapes, using mathematical reasoning in active learning experiences
Assessment	Investigation– Shopping for Fruit (Statistics and Probability) Students collect, sort and compare data. Monitoring short response - (Space - Position and Language) Students describe the position and location of themselves and objects in relation to other people and objects. Monitoring short response - (Patterns) Students copy and continue a pattern and identify is a sequence is a pattern or not. .	Short Response - (Number and Algebra) Students represent practical situations involving adding to 10 and equal sharing to 20. Monitoring - (Number and Algebra – Partitioning) Students partition and combine collections. Monitoring - (Number and Algebra – Subitising) Students state amounts in collections to 5 using dice formation and non-stand arrangements Monitoring - (Measurement and Space - sequence events) Students recall the days of the week, order times of day and match events to times of the day	Observed Demonstration - (Number and Algebra) Students represent practical situations involving quantifying, adding to and taking away from collections up to 20. Observed Demonstration - (Measurement and Space - shape), Measurement and Space – mass, capacity, length, events) Students compare mass, length, capacity and duration using direct comparison.	Observed Demonstration – (Number and Algebra) Students partition, combine and compare collections. Observed Demonstration – (Shape) Students name, create and sort shapes. Monitoring - (Number) Students connect number names and numerals and sequence 0-20.

Year 1	**Number and Algebra**
	• Demonstrate that numbers to 99 can be represented and composed in various ways
	• Recognise patterns in the environment and choose ways of representing thinking when communicating with others
	Space
	• Use simple transformations, directions and pathways to move the positions of people and objects within a space
	Statistics
	• Use simple surveys to collect and sort data, based on a question of interest
	• Recognise that data can be represented in different ways explain patterns in the results
		Number and Algebra
		• Partition 1-digit numbers and 2-digit numbers (standard)
		• Recognise patterns in numbers and extend knowledge of numbers to 99
		• Use physical or virtual materials and diagrams when modelling practical problems (addition and subtraction to 20) through active learning experiences and employ different strategies and discuss the reasonableness of answers
		• Use curiosity and imagination to explore situations and choose ways of representing thinking when communicating with others
		• Quantify collections using skip counting (10s)
		Measurement
		• Explain ways of making direct and indirect comparisons and begin to use uniform informal units to measure duration of events
			Number
			• Partition 2-digit Numbers (non-standard)
			• Demonstrate that numbers can be represented, partitioned and composed in various ways
			• Use physical or virtual materials and diagrams when modelling practical problems (addition and subtraction to 20) through active learning experiences and employ different strategies and discuss the reasonableness of answers
			• Recognise patterns in numbers and extend knowledge of numbers to at least 120
			Measurement
			• Explain ways of making direct and indirect comparisons and begin to use uniform informal units to measure attributes (length, mass, capacity)
				Number and Algebra
				• Use physical or virtual materials and diagrams when modelling practical problems (addition and subtraction to 20) through active learning experiences and employ different strategies and discuss the reasonableness of answers
				• Develop a sense of equivalence, fairness, repetition and variability when engaging in play-based and practical activities
				• Use curiosity and imagination to explore situations, recognise patterns in the environment and choose ways of representing thinking when communicating with others
				• Recognise patterns in numbers and extend knowledge of numbers to at least 120
				• **Space**
				  • Recognise shapes and objects in the environment
				  • Reason spatially and use spatial features to classify shapes and objects

Assessment	Teen Number Thinkboard Technique: Other: Observed demonstration, interview Type of Text: Other: description AT1.2 Giving and following directions Technique: project Type of Text: Other: description AT1.3 Collecting, representing and interpreting data Technique: investigation AT2.2 Comparing and ordering duration of time Technique: project Type of Text: Comparison Type of Text: survey	AT1.1 Exploring numbers to 99 and repeating patterns Technique: Other: Observed demonstration Type of Text: Other: Calculation AT2.1 *Exploring numbers, problem-solving and patterns* Technique: Project Type of Text: Other: Calculation AT2.2 Comparing and ordering duration of time Technique: project Type of Text: Comparison	AT3.1 Partitioning numbers to at least 120 Technique: Other: Observed demonstration Type of Text: Other: Calculation AT3.2 Comparing and classifying shapes and objects Technique: Other: short response Type of Text: comparison AT3.3 Comparing and ordering objects using length, mass and capacity Technique: project Type of Text: comparison	AT4.1 Understanding and using number Technique: Other: short response Type of Text: Other: Calculation

Year 2	• **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 two digit 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.	• **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. • **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.	• **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.	• **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	Short answer questions - Collecting and representing data Students collect, organise and represent data to make simple inferences. 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. 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. Assignment/Project - Investigating outcomes of daily events Students use simple strategies to reason and solve a chance inquiry question.	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. Observation - Investigating simple maps of familiar locations Students use simple strategies to reason and solve a location inquiry question. 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	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. Assignment/Project - Investigating numbers to 1 000 Students use simple strategies to reason and solve number inquiry questions. Short answer questions - Ordering shapes and objects using informal units Students measure, compare and order several objects using uniform informal units. 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.	Short answer questions - Explaining transformations Students explain the effects of one-step transformations. Assignment/Project - Investigating shapes and location Students use simple strategies to reason and solve number and measurement inquiry questions. Short answer questions - Recognising two-dimensional shapes and three-dimensional objects Students draw two-dimensional shapes and recognise the features of three-dimensional objects. Short answer questions - Representing data and chance Students describe outcomes for everyday events, collect, organise, represent and make sense of collected data, and make simple inferences.
Year 3	**Measurement:** **Length, Mass and Capacity** • use metric units to measure and compare events and objects • become increasingly aware of the usefulness of mathematics to model situations and solve practical problems **Space:** **Angles** • determine key features of objects and spaces including angles, and use these when building models and spatial representations **3D Objects** • become increasingly aware of the usefulness of mathematics to model situations and solve practical problems **Statistics:** **Data** • undertake, with guidance, statistical investigations that are meaningful, making decisions about the use and representation of categorical and discrete numerical data and reporting findings • recognise that mathematics has conventions and language enabling the unambiguous communication of ideas and results •	**Number:** • manipulate numbers to 9 999 using understanding of place value in the base-10 number system including partitioning and regrouping **Space:** **Mapping** • determine key features of familiar spaces and use these when creating spatial representations (maps) **Number and Algebra:** • manipulate numbers using a range of strategies that are based on proficiency with single-digit addition facts and understanding of place value in the base-10 number system, partitioning and regrouping • model situations and solve practical problems • begin to apply understanding of algorithms and technology to experiment with numbers and recognise patterns • develop addition and multiplication facts • learn to formulate, choose and use calculation strategies, communicating solutions within a modelling context	**Number:** **Money** • recognise the relationship between dollars and cents and learn to represent money values in different ways **Fractions** • recognise and represent unit fractions and multiples in different ways, communicating solutions within a modelling context **Multiplication** • develop, extend and apply addition and multiplication facts and related facts for subtraction and division through recognising connections between operations and develop automaticity for 3, 4, 5, and 10 multiplication facts through games and meaningful practice.	**Number:** • manipulate numbers beyond 10 000 using understanding of place value in the base-10 number system, partitioning and regrouping • develop, extend and apply addition and multiplication facts and related facts for subtraction and division through recognising connections between operations and develop automaticity for 3, 4, 5, and 10 multiplication facts through games and meaningful practice • learn to formulate, choose and use calculation strategies, communicating solutions within a modelling context • recognise the relationship between dollars and cents and learn to represent money values in different ways **Measurement:** **Time** • describe the relationship between the hours and minutes on analogue and digital clocks, and read the time to the nearest minute • use metric units to measure and compare events and objects • become increasingly aware of the usefulness of mathematics to model situations and solve practical problems **Probability:** **Chance** • develop a qualitative understanding of chance and use the language of chance to describe and compare the outcomes of familiar chance events • become increasingly able to understand that different outcomes can be the results of random processes

Assessment	Measuring and comparing objects using familiar metric units, identifying angles and classifying 3D objects. Investigation: Guided statistical investigation	Short Answer Questions: Place Value Short Answer: Interpreting and creating maps. Short Answer: Solving number problems and exploring simple patterns	Online Test: eMoney Observed demonstration: Representing unit fractions and their multiples Short answer questions - Multiplication	Project: Solving practical problems and financial problems. Short Response: Telling time to the nearest minute Short Answer: Measuring and comparing the duration of events Investigation: Identifying likelihood of events and conducting chance experiments.
Year 4	• **Number and place value** - identify and describe place value in 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; **Location and transformation** - investigate different types of symmetry; analyse and create symmetrical designs. 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. • **Chance** - compare dependent and independent events, describe probabilities of everyday events.	• **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. **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. **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. Use am and pm notation, solve simple time problems.	• **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. • **Shape** - compare the areas of regular and irregular shapes using informal units of area measurement. Explore properties of polygons and quadrilaterals, identify combined shapes, investigate properties of shapes within tangrams, create polygons and combined shapes using tangrams. **Data representation and interpretation** - collect and record data, communicate information using graphical displays and evaluate the appropriateness of different displays. Write questions to collect data, collect and record data, display and interpret data. **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.	• **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. Communicate sequences of simple fractions. **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. • **Patterns and algebra** - use equivalent addition and subtraction number sentences to find unknown quantities. **Patterns and algebra** - use equivalent multiplication and division number sentences to find unknown quantities.
Assessment	Short answer questions - Identifying and explaining chance events Students identify dependent and independent events and explain the chance of everyday events occurring. Short answer questions - Using the properties of odd and even numbers Students use the relationships between the four operations and odd and even numbers. Short answer questions – Location and transformation and Symmetry Students determine types of symmetry, analyse symmetrical patterns, determine cardinal points, locate items on a map and use grid referencing systems.	Short answer questions – multiplication and division Students solve problems using multiplication and division strategies. Students explain unknown quantities for multiplication and division. Short answer questions - Investigating time Students use simple strategies to reason and solve a measurement inquiry question. Short answer questions - Place value Students demonstrate understanding of place value, operations and fractions.	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. Short answer questions - Solving purchasing problems Students solve simple purchasing problems including the calculation of change. 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.	Short answer questions - Recognising and locating fractions Students locate familiar fractions on a number line and recognise common equivalent fractions in familiar contexts. Short answer questions - Connecting decimals and fractions Students demonstrate and explain the connections between fractions and decimals to hundredths. Short answer questions - Recognising and locating fractions Students locate familiar fractions on a number line and recognise common equivalent fractions in familiar contexts.
Year 5	In this Mathematics unit, Year 5 students will explore factors and multiples by breaking numbers into their factors and identifying multiples. They will improve their skills in multiplying large numbers and dividing by single-digit numbers, using efficient strategies and checking their answers with estimation. Students will look for patterns in factors and multiples by creating simple rules (algorithms) and explaining what they find. The unit also introduces probability, where students will conduct chance experiments, list possible outcomes, and compare the likelihood of events. They will explore the difference between events that are equally likely and those that are not. By the end of the unit, students will be able to apply these concepts to solve problems, explain their thinking, and understand how chance works in everyday situations.	In this Mathematics unit, Year 5 students will explore measurement and geometry concepts to solve practical problems. They will choose and use appropriate metric units to measure length, mass, and capacity, applying these skills to calculate perimeter and area in real-world contexts. Students will develop their understanding of time by converting between 12-hour and 24-hour formats, enhancing their ability to read and use time effectively. The unit will also focus on geometry, where students will connect three-dimensional objects to their two-dimensional nets and use these relationships to better understand shapes and structures. Additionally, they will perform transformations such as flips, slides, and turns and describe the results, identifying any symmetries within shapes and patterns. By the end of the unit, students will confidently apply measurement and geometry skills to solve problems and recognize patterns in the world around them.	In this Mathematics unit, Year 5 students will expand their understanding of numbers by exploring decimals, fractions, and percentages. They will use place value to write and order decimals, including those greater than one, and work with fractions to order, represent, add, and subtract fractions with the same or related denominators. Students will also learn to represent common percentages and connect them to their equivalent fractions and decimals, building a strong foundation in understanding the relationships between these concepts. The unit will focus on geometry skills, where students will estimate, construct, and measure angles in degrees. Additionally, they will use grid coordinates to locate, describe, and move positions, developing their spatial reasoning and problem-solving abilities. By the end of the unit, students will confidently use decimals, fractions, and percentages in practical situations and apply their geometric skills to analyse and solve problems.	In this Mathematics unit, Year 5 students will apply mathematical modelling to solve financial and practical problems. They will practice formulating and solving problems, selecting appropriate arithmetic operations, and interpreting results in context. Students will deepen their understanding of number properties and operations by solving numerical equations involving multiplication and division, using these skills to find unknown values. The unit also focuses on data collection and analysis. Students will plan and conduct statistical investigations, gathering nominal, ordinal, and discrete numerical data using digital tools. They will analyse data by identifying the mode and interpreting the shape of distributions. Additionally, students will learn to interpret and compare data presented in line graphs. By the end of the unit, students will confidently solve real-world problems using mathematical strategies and analyse data to make meaningful comparisons and interpretations.

	Column 1	Column 2	Column 3	Column 4
Assessment	**Assignment/Project - Investigating chance experiments** To use simple strategies to reason and solve chance inquiry questions. **Short Answer Questions - Describing chance and probability** To mathematically describe chance experiments involving equally likely outcomes and to represent those outcomes. **Short Answer Questions – Multiplication & Division, Factors & Multiples, Using Algorithms** To explore factors and multiples by breaking numbers into their factors and identifying multiples. To multiply large numbers and divide by single-digit numbers, using efficient strategies and checking answers with estimation. To identify patterns in factors and multiples by creating simple rules (algorithms) and explaining findings.	**Short Answer Questions - Time** Part A: to convert between 12-hour and 24-hour time formats so that we can read and use different time systems in daily life. **Short Answer Questions/Practical Investigation Task - Measurement** Part B: to choose and use appropriate metric units to measure length, mass, and capacity, and to calculate the perimeter and area of shapes, so that we can accurately compare and solve real world measurement problems. **Short Answer Questions – 3D Shape & Symmetry** Part C: to connect three-dimensional objects to their two-dimensional nets; and to perform transformations, such as flips, slides, and turns, and describe symmetry.	**Short Answer Questions - Fractions, Decimals & Percentages** Part A: to compare, order, and represent fractions, decimals, and percentages; add and subtract fractions; and to convert between fractions, decimals, and percentages. **Short Answer Questions - Angles & Measurement** Part B: to estimate, measure, and construct angles in degrees using appropriate tools. **Short Answer Questions - Grid Coordinates & Position** Part C: to use grid coordinates to locate, describe, and move positions.	**Short Answer Questions - Problem Solving Multiplication and Division Fact Families** Part A:to use multiplication and division fact families to solve equations and find unknown values. **Short Answer Questions - Problem Solving Financial Modelling** Part B: to use mathematical modelling to solve practical financial problems and interpret the results. **Assignment/Project and Short Answer Questions - Statistics** Part C: to plan and carry out a statistical investigation and interpret data using graphs and summaries.
Year 6	**Number** expand the repertoire of numbers students work with to include rational numbers and the use of integers in practical contexts such as locating points in the four quadrants of a Cartesian plane solve addition and subtraction problems involving fractions with related denominators **Space** solve practical problems and justify solutions using coordinates on a Cartesian plane begin to formally use deductive reasoning in spatial contexts involving tessellating patterns using combinations of transformations **Statistics** determine the mode and range and discuss the shape of distributions in reports of findings from statistical investigations using discrete and continuous numerical and ordinal categorical data	**Number and Algebra** Solve problems using the properties of prime, composite and square numbers. Find unknown values in numerical equations involving combinations of arithmetic operations. **Measurement - Time** Use mathematical modelling to solve practical problems using timetables	**Number** Use mathematical modelling to solve financial and other practical problems involving percentages and rational numbers, formulating and solving the problem, and justifying choices. **Measurement & Space** Add and subtract fractions with related denominators. Convert between common units of length, mass and capacity. Use the formula for the area of a rectangle and angle properties to solve problems. Use all 4 operations with decimals and connect decimal representations of measurements to the metric system. **Number** Use mathematical modelling to solve financial and other practical problems involving percentages and rational numbers, formulating and solving the problem, and justifying choices.	**Number** Solve problems involving finding a fraction, decimal or percentage of a quantity and use estimation to find approximate solutions to problems involving rational numbers and percentages. Identify and explain rules used to create growing patterns. Create and use algorithms to generate sets of numbers, using a rule. **Probability** Assign probabilities using common fractions, decimals and percentages. Conduct simulations using digital tools, to generate and record the outcomes from many trials of a chance experiment. Compare observed frequencies to the expected frequencies of the outcomes of chance experiments.
Assessment	Short answer questions – Using integers and ordering common fractions To represent integers on a number line and order common fractions, with reasons. Short answer questions – Locating ordered pairs on the Cartesian plane and creating tessellating patterns To locate and represent ordered pairs on the cartesian plane and create tessellating patterns using combinations of transformations. Short answer questions – Planning and conducting a statistical investigation about sustainability To plan and conduct a statistical investigation and compare distributions of data. To critique arguments presented in advertisements based on statistics.	Short answer questions – Finding unknowns using properties of numbers and mathematical modelling to create a budget Students find unknowns involving order of operations and solve problems using the properties of prime, composite and square numbers. To use mathematical modelling to create a budget for a class event. Short answer questions - Interpreting and using timetables Students interpret and use timetables and plan an itinerary.	Short answer questions - Using mathematical modelling to solve a practical problem involving percentages and rational numbers Students use mathematical modelling to find the best deal using percentages and rational numbers Short answer questions - Adding and subtracting fractions, converting units of measurement and solving area and angle problems Students add and subtract fractions with related denominators. To convert between common units of length, mass and capacity and use all 4 operations with decimals. To solve problems involving areas of a rectangle and angle properties. Short answer questions - Using mathematical modelling to solve a practical problem involving percentages and rational numbers Students use mathematical modelling to find the best deal using percentages and rational numbers	Short answer questions - Using pattern rules and solving problems using fractions, decimals and percentages Students estimate and solve problems involving fractions, decimals and percentages. They create and use algorithms and explain rules. Short answer exam - Assigning probabilities, conducting repeated chance experiments and running simulations, and comparing frequencies Students assign probabilities, conduct a chance experiment, run simulations and analyse results to solve a problem.

Summative Assessment Category   ☐ Monitoring   ☐ Observation   ☐ Interview   ☐ Written   ☐ Assignment/Project   ☐ Short answer   ☐ Practical   ☐ Exam/Test