

# Year 4 Mathematics

## Curriculum and assessment plan

### Example

Level description	Context and cohort considerations
<p>In Year 4, learning in Mathematics builds on each student's prior learning and experiences. Students engage in a range of approaches to learning and doing mathematics that develop their understanding of and fluency with concepts, procedures and processes by making connections, reasoning, problem-solving and practice. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.</p> <p>Students further develop proficiency and positive dispositions towards mathematics and its use as they:</p> <ul style="list-style-type: none"> <li>• draw on their proficiency with number facts, fractions and decimals to deepen their appreciation of how numbers work</li> <li>• develop and use strategies for multiplication that are based on their understanding of multiplication as an operation and their knowledge of laws for arithmetic operations</li> <li>• choose and use efficient strategies when modelling problems, communicating their solutions within the context of the situation</li> <li>• use algorithms to generate sets of numbers, recognising and describing any patterns that emerge</li> <li>• become aware of the importance of context and purpose when they make judgements and reflect on the reasonableness of measurements and the results of calculations, and how they choose to represent mathematics and mathematical information</li> <li>• measure and estimate common attributes of objects using conventional instruments and appropriate metric units</li> <li>• develop and use surveys to obtain data that is directly relevant to their statistical investigations</li> <li>• draw on their reasoning skills to analyse, categorise and order chance events and identify independent and dependent events</li> <li>• investigate variability by conducting repeated chance experiments and observing results.</li> </ul>	<p>The Year 4 cohort participate in daily mathematics learning. This plan has considered:</p> <ul style="list-style-type: none"> <li>• summative and formative data from Year 3 showing the need to support and extend on students emerging partitioning and fractional understandings</li> <li>• exploration and use of digital tools, e.g. virtual material, electronic devices, programs and dynamic geometric software, in relevant contexts that support the learning and doing of mathematics.</li> </ul> <p>Across the year, the contexts for teaching and learning reflect authentic learning experiences for the students. Unit 3 provides an opportunity to connect statistical investigations to the Humanities and Social Sciences (HASS) learning area. Unit 4 provides an opportunity to engage in problem-solving using an end-of-year event as the context for learning.</p>

Unit 1 — What is the pattern?	Unit 2 — How do we use fractions to find solutions?	Unit 3 — Why do we measure?	Unit 4 — How can we model the problem?
<b>Duration: 10 weeks</b>	<b>Duration: 10 weeks</b>	<b>Duration: 10 weeks</b>	<b>Duration: 10 weeks</b>
<p>Understanding patterns and functions is an important mathematical skill, as identifying elements and relationships within a concept or problem supports critical and creative thinking skills. This unit provides opportunity for students to engage in pattern and function investigations across multiple contexts, where they make connections between different pieces of information, make predictions and draw conclusions based on evidence.</p> <p>In the first phase of this unit, students revise Number and Algebra concepts from Year 3 by exploring patterns in a range of contexts. They review skip counting of known facts and investigate conditions for a number to be odd or even. Through practical investigations with physical materials, students explain and use the properties of odd and even numbers, e.g. explaining why some materials can be evenly shared between two and others cannot, or using diagrams, arrays and skip counting to explain even numbers. Students develop critical and creative thinking skills as they analyse pattern structures and functions, identifying the relationships within pattern structures and predict and describe emerging patterns. Using their knowledge of the properties of numbers and operations, students apply these strategies to find unknown values in numerical equations involving addition and subtraction. Students then apply their proficiencies in a problem-solving project where they use the computational thinking process and the properties of odd and even numbers to follow and create algorithms that generate sets of numbers. They use the properties of odd and even numbers to check the reasonableness of responses when finding unknown values in simple equations. Students create an investigation report showcasing their findings to their patterning investigations.</p> <p>In the second phase of this unit, students transfer their knowledge from patterning with numbers to investigate patterns and symmetry in spatial contexts, e.g. when viewing stimulus pictures and designs or exploring natural patterns in plants and flowers. Students then use physical or virtual representations of shapes and objects and identify line and rotational symmetry. They investigate angles and compare them to a right angle. Students apply their understandings to create symmetrical patterns or pictures. A collection of physical or virtual representations from investigations is communicated through a spoken presentation using multimedia, e.g. annotated photographs and drawings, dynamic geometric software.</p>	<p>Fractions help students to understand how a whole can be divided into equal parts. This knowledge relates to proportion, relationships between different parts and understanding how to break problems into smaller, more manageable parts to find solutions. In this unit, students deepen their fractional understandings, make connection between different representations and apply understandings to measurement and probability contexts.</p> <p>In the first phase of this unit, students build on fractional understandings from Year 3 where they represented unit fractions and their multiples. They extend on their understandings to include mixed numerals using physical materials, collections, pictures, diagrams and symbols to represent fractions in a variety of ways. Students then count and represent fractions, including mixed numerals, on a number line in whole class and small group contexts. Through guided learning experiences with physical materials and paper folding, students recognise equivalent fractions in fraction families. They create models using collections of materials and manipulatives, making connection to the verbal and symbolic written form. Students deepen their understanding by exploring models of equivalent fractions in measurement contexts, e.g. three <math>\frac{1}{4}</math> cups are equal to one <math>\frac{3}{4}</math> cup. Students continue to apply fractional understandings when they use scaled instruments to solve problems involving mass and capacity. Evidence of student understanding and fluency will be captured through a supervised assessment.</p> <p>In the second phase of this unit, fractional understandings are applied to probability situations, where students analyse and compare the likelihood of outcomes to order them in terms of likelihood, e.g. least likely, most likely. Through hands-on learning experiences and game play, students apply this knowledge to identify and describe the outcomes and the likelihood of everyday events occurring. Through a problem-solving project students order and discuss events or outcomes in terms of likelihood. They identify independent or dependent results and conduct repeated chance experiments involving coins, dice and a variety of spinners. Critical and creative thinking skills are deepened when students identify and evaluate information to describe variability in results. Students present their findings from the probability experiment in an investigation report.</p>	<p>Measurement encourages critical and creative thinking skills as children estimate, compare and evaluate quantities. It helps them make informed decisions based on their understanding of size, quantity and dimensions of objects. In this unit, students build on their fractional understandings from Unit 2 and apply this in measurement contexts. They also continue to develop and use appropriate mathematical language.</p> <p>In the first phase of this unit, students use physical and visual representations to extend their understanding of the place value system. Referring back to patterns and structures from Unit 1, students review the pattern and structure of the place value system (based on powers of ten). Using this knowledge, students multiply natural numbers by multiples of ten and represent tenths and hundredths with physical and visual representations and diagrams. Through discussion, paper folding and visual models, students are then supported to make the connection between fraction and decimal notation.</p> <p>Students deepen and apply understandings of place value and decimal notation to investigate measurement contexts. Critical and creative thinking skills are encouraged as students develop questions on why measuring is important. Students use scaled instruments to investigate measurement situations and seek solutions to questions posed. They record measures of length and temperature in whole and part units. They also measure the perimeter and area of shapes and enclosed spaces, using fractional parts and whole units. Evidence of student learning will be collected through a supervised assessment.</p> <p>In the second phase of the unit, students continue to explore measurement in a statistical investigation focussed on the inquiry question, 'What is the relationship between rainfall and temperature for different locations across Australia?' This assessment provides an opportunity to connect to Year 4 Humanities and Social Sciences learning area content. Students create many-to-one pictographs and column graphs and use digital tools where appropriate to record and represent data. Students assess the suitability of their data displays by analysing the effectiveness of different visualisations, comparing the usefulness of each representation for interpreting the data. They communicate findings through a project.</p>	<p>Engaging in problem-solving situations nurtures critical thinking skills and allows students to identify relevant information, employ strategies and draw conclusions to communicate their findings. In this unit, students use mathematical models to comprehend the problem and find solutions.</p> <p>In the first phase of this unit, students draw on their Number knowledge from previous units to model financial and practical problems. Students engage in a range of problem-solving activities to develop confidence with the mathematical modelling process by using physical materials, diagrams and number sentences. They develop efficient strategies involving the four operations, e.g. partitioning, inverse relationships, compatible numbers, jump strategies, split strategies, compensate strategies, bridging tens. They recall and demonstrate proficiency with multiplication facts up to <math>10 \times 10</math> and related division facts using arrays, counters, grid paper, diagrams to record strategies, e.g. doubling, halving, commutativity, using a known fact. Students then apply their understandings and skills in a project where they plan an end of year event with invited guests. They calculate the quantity of biscuit packets required to host a morning tea and calculate the total cost. Students use their proficiency with number facts to calculate efficiently and use rounding and estimation strategies to determine the reasonableness of results.</p> <p>In the second phase of this unit, students solve practical problems involving time duration. They convert between units of time, using 'am' and 'pm' appropriately, and calculate the amount of time between events. Students draw on the fractional understandings from Units 2 and 3 when calculating time durations. Students also create and interpret grid references and use them to locate and describe positions. They practice giving and following directions in small groups.</p> <p>In their project, students create a schedule and convert between units of time. Students also create a map of the location of their event in their school environment, including the grid references. They write directions for guests and describe positions and pathways from locations to the event, e.g. the classroom, office, hall, carpark. Students record evidence of their problem-solving proficiencies and solutions in a learning journal.</p>

Where there is one assessment item within a unit, the corresponding achievement standard aspect/s is indicated in blue.

Where there is a second assessment item within a unit, the corresponding achievement standard aspect/s is indicated in yellow.

	Unit 1 — What is the pattern?	Unit 2 — How do we use fractions to find solutions?	Unit 3 — Why do we measure?	Unit 4 — How can we model the problem?				
	Assessment 1 — Project: Computational thinking	Assessment 3 — Supervised assessment	Assessment 5 — Supervised assessment	Assessment 7 — Project: Mathematical modelling				
	Term/week	Term/week	Term/week	Term/week				
Assessment	<p><b>Description:</b> In response to questions, students investigate numerical patterns where they use computational thinking to find solutions. Students sequence steps, finding unknown values in numerical equations involving addition and subtraction. They follow and create algorithms to explore the properties of odd and even numbers and identify emerging patterns, e.g. odd + odd = even, odd x odd = odd.</p> <p><b>Technique:</b> Project</p> <p><b>Mode:</b> Written (including diagrams and numerical equations)</p> <p><b>Conditions:</b></p> <ul style="list-style-type: none"> <li>completed over multiple lessons in week 4</li> </ul>	Term 1 Week 4	<p><b>Description:</b> Under supervised conditions, through practical hands-on demonstrations and short written responses, students demonstrate their understanding and fluency when:</p> <ul style="list-style-type: none"> <li>counting and representing fractions on a number line</li> <li>recognising equivalent fractions</li> <li>using scaled instruments and appropriate units to measure mass and capacity.</li> </ul> <p><b>Technique:</b> Supervised assessment</p> <p><b>Mode:</b> Written and practical (using scaled instruments to measure mass and capacity)</p> <p><b>Conditions:</b></p> <ul style="list-style-type: none"> <li>up to 40 minutes, plus 5 minutes perusal, planning and/or teacher instruction time</li> <li>may be completed over multiple lessons or broken into components in week 5</li> <li>practical responses are observed by the teacher</li> </ul>	Term 2 Week 5	<p><b>Description:</b> Students answer short response questions focusing on their understanding, fluency and reasoning when:</p> <ul style="list-style-type: none"> <li>using their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10</li> <li>making connections between fraction and decimal notations in number and measurement contexts</li> <li>using scaled instruments and appropriate units to measure length and temperature</li> <li>measuring and approximating perimeters and areas.</li> </ul> <p><b>Technique:</b> Supervised assessment</p> <p><b>Mode:</b> Written and practical (using scaled instruments to measure length)</p> <p><b>Conditions:</b></p> <ul style="list-style-type: none"> <li>up to 40 minutes, plus 5 minutes perusal, planning and/or teacher instruction time</li> <li>may be completed over multiple lessons or broken into components in week 6</li> </ul>	Term 3 Week 6	<p><b>Description:</b> In a learning journal, students record responses to a series of questions relating to an end of year event. Students demonstrate all four mathematical proficiencies in their learning journal when:</p> <ul style="list-style-type: none"> <li>using the mathematical modelling process to formulate and calculate quantities and catering costs for biscuits at morning tea</li> <li>representing the situation with number sentences, diagrams and arrays and providing a short, written explanation of their findings</li> <li>planning a timetable for their event and calculating time durations</li> <li>using grid references to map the school environment and providing written directions to help invited guests navigate the school.</li> </ul> <p><b>Technique:</b> Project</p> <p><b>Mode:</b> Written (including diagrams, arrays, timetables and maps)</p> <p><b>Conditions:</b></p> <ul style="list-style-type: none"> <li>completed over multiple lessons in week 7</li> <li>written responses up to 200 words</li> </ul>	Term 4 Week 7

Unit 1 — What is the pattern?		Unit 2 — How do we use fractions to find solutions?		Unit 3 — Why do we measure?		Unit 4 — How can we model the problem?	
Assessment	<b>Assessment 2 — Project</b>	<b>Term/week</b>	<b>Assessment 4 — Project: Probability experiment and simulations</b>	<b>Term/week</b>	<b>Assessment 6 — Project: Statistical investigation</b>	<b>Term/week</b>	
	<p><b>Description:</b> Students explore spatial and measurement contexts to create physical or virtual representations of their pattern findings, sharing their understandings through a spoken presentation using multimedia. In the presentation students share:</p> <ul style="list-style-type: none"> <li>representations and approximations of shapes and objects in the environment</li> <li>angle comparisons relative to a right angle (using their names)</li> <li>identification of line and rotational symmetry in plane shapes</li> <li>creation of symmetrical patterns.</li> </ul> <p><b>Technique:</b> Project <b>Mode:</b> Multimodal (using multimedia) <b>Conditions:</b></p> <ul style="list-style-type: none"> <li>issued in week 6 and completed over multiple lessons with presentations completed by the end of week 8</li> <li>spoken/signed or multimodal responses up to 1 minute</li> </ul>	Term 1 Week 8	<p><b>Description:</b> Students conduct a probability experiment to investigate the likelihood of an event occurring. They present their findings in an investigation report that focuses on all four proficiencies when:</p> <ul style="list-style-type: none"> <li>conducting repeated chance experiments</li> <li>ordering events/outcomes of the chance experiments in terms of likelihood</li> <li>identifying whether events are independent or dependent</li> <li>describing the variation in results.</li> </ul> <p><b>Technique:</b> Project <b>Mode:</b> Written and practical (conducting chance experiments) <b>Conditions:</b></p> <ul style="list-style-type: none"> <li>completed over multiple lessons in week 7</li> <li>practical responses are observed by the teacher</li> </ul>	Term 2 Week 7	<p><b>Description:</b> Students explore categorical and discrete numerical data through statistical investigations in response to the inquiry question, 'What is the relationship between rainfall and temperature for different locations across Australia?' Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They interpret results and communicate findings. Students use digital tools where appropriate.</p> <p><b>Technique:</b> Project <b>Mode:</b> Written (using digital tools to create data representations) <b>Conditions:</b></p> <ul style="list-style-type: none"> <li>issued in week 8 and completed over multiple lessons by end of week 9</li> </ul>	Term 3 Week 9	





	Unit 1 — What is the pattern?	Unit 2 — How do we use fractions to find solutions?	Unit 3 — Why do we measure?	Unit 4 — How can we model the problem?
Achievement standard	<p>By the end of Year 4, students use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10. They use mathematical modelling to solve financial and other practical problems, formulating the problem using number sentences, solving the problem choosing efficient strategies and interpreting results in terms of the situation. Students use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently. They choose rounding and estimation strategies to determine whether results of calculations are reasonable. <b>Students use the properties of odd and even numbers.</b> They recognise equivalent fractions and make connections between fraction and decimal notations. Students count and represent fractions on a number line. <b>They find unknown values in numerical equations involving addition and subtraction. Students follow and create algorithms that generate sets of numbers and identify emerging patterns.</b></p> <p>They use scaled instruments and appropriate units to measure length, mass, capacity and temperature. Students measure and approximate perimeters and areas. They convert between units of time when solving problems involving duration. <b>Students compare angles relative to a right angle using angle names. They represent and approximate shapes and objects in the environment.</b> Students create and interpret grid references. <b>They identify line and rotational symmetry in plane shapes and create symmetrical patterns.</b></p> <p>Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context. Students order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent. They conduct repeated chance experiments and describe the variation in results.</p>	<p>By the end of Year 4, students use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10. They use mathematical modelling to solve financial and other practical problems, formulating the problem using number sentences, solving the problem choosing efficient strategies and interpreting results in terms of the situation. Students use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently. They choose rounding and estimation strategies to determine whether results of calculations are reasonable. <b>Students use the properties of odd and even numbers.</b> They recognise equivalent fractions and make connections between fraction and decimal notations. <b>Students count and represent fractions on a number line.</b> They find unknown values in numerical equations involving addition and subtraction. Students follow and create algorithms that generate sets of numbers and identify emerging patterns.</p> <p><b>They use scaled instruments and appropriate units to measure length, mass, capacity and temperature.</b> Students measure and approximate perimeters and areas. They convert between units of time when solving problems involving duration. Students compare angles relative to a right angle using angle names. They represent and approximate shapes and objects in the environment. Students create and interpret grid references. They identify line and rotational symmetry in plane shapes and create symmetrical patterns.</p> <p>Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context. <b>Students order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent. They conduct repeated chance experiments and describe the variation in results.</b></p>	<p>By the end of Year 4, students use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10. They use mathematical modelling to solve financial and other practical problems, formulating the problem using number sentences, solving the problem choosing efficient strategies and interpreting results in terms of the situation. Students use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently. They choose rounding and estimation strategies to determine whether results of calculations are reasonable. <b>Students use the properties of odd and even numbers.</b> They recognise equivalent fractions and make connections between fraction and decimal notations. <b>Students count and represent fractions on a number line.</b> They find unknown values in numerical equations involving addition and subtraction. Students follow and create algorithms that generate sets of numbers and identify emerging patterns.</p> <p><b>They use scaled instruments and appropriate units to measure length, mass, capacity and temperature.</b> Students measure and approximate perimeters and areas. They convert between units of time when solving problems involving duration. Students compare angles relative to a right angle using angle names. They represent and approximate shapes and objects in the environment. Students create and interpret grid references. They identify line and rotational symmetry in plane shapes and create symmetrical patterns.</p> <p><b>Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context.</b> Students order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent. They conduct repeated chance experiments and describe the variation in results.</p>	<p>By the end of Year 4, students use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10. <b>They use mathematical modelling to solve financial and other practical problems, formulating the problem using number sentences, solving the problem choosing efficient strategies and interpreting results in terms of the situation. Students use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently.</b> They choose rounding and estimation strategies to determine whether results of calculations are reasonable. <b>Students use the properties of odd and even numbers.</b> They recognise equivalent fractions and make connections between fraction and decimal notations. <b>Students count and represent fractions on a number line.</b> They find unknown values in numerical equations involving addition and subtraction. Students follow and create algorithms that generate sets of numbers and identify emerging patterns.</p> <p>They use scaled instruments and appropriate units to measure length, mass, capacity and temperature. Students measure and approximate perimeters and areas. They convert between units of time when solving problems involving duration. <b>Students compare angles relative to a right angle using angle names. They represent and approximate shapes and objects in the environment. Students create and interpret grid references.</b> They identify line and rotational symmetry in plane shapes and create symmetrical patterns.</p> <p>Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context. Students order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent. They conduct repeated chance experiments and describe the variation in results.</p>
Moderation	Expert: Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area.	Consensus: Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area.	Calibration: Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area.	Consensus: Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area.

Content descriptions	Units				Content descriptions	Units				Content descriptions	Units			
Number	1	2	3	4	Algebra	1	2	3	4	Measurement	1	2	3	4
recognise and extend the application of place value to tenths and hundredths and use the conventions of decimal notation to name and represent decimals AC9M4N01	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	find unknown values in numerical equations involving addition and subtraction, using the properties of numbers and operations AC9M4A01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	interpret unmarked and partial units when measuring and comparing attributes of length, mass, capacity, duration and temperature, using scaled and digital instruments and appropriate units AC9M4M01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
explain and use the properties of odd and even numbers AC9M4N02	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	recall and demonstrate proficiency with multiplication facts up to 10 x 10 and related division facts; extend and apply facts to develop efficient mental strategies for computation with larger numbers without a calculator AC9M4A02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	recognise ways of measuring and approximating the perimeter and area of shapes and enclosed spaces, using appropriate formal and informal units AC9M4M02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
find equivalent representations of fractions using related denominators and make connections between fractions and decimal notation AC9M4N03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>						solve problems involving the duration of time including situations involving “am” and “pm” and conversions between units of time AC9M4M03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
count by fractions including mixed numerals; locate and represent these fractions as numbers on number lines AC9M4N04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						estimate and compare angles using angle names including acute, obtuse, straight angle, reflex and revolution, and recognise their relationship to a right angle AC9M4M04	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
solve problems involving multiplying or dividing natural numbers by multiples and powers of 10 without a calculator, using the multiplicative relationship between the place value of digits AC9M4N05	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
develop efficient strategies and use appropriate digital tools for solving problems involving addition and subtraction, and multiplication and division where there is no remainder AC9M4N06	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
choose and use estimation and rounding to check and explain the reasonableness of calculations including the results of financial transactions AC9M4N07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
use mathematical modelling to solve practical problems involving additive and multiplicative situations including financial contexts; formulate the problems using number sentences and choose efficient calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation AC9M4N08	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
follow and create algorithms involving a sequence of steps and decisions that use addition or multiplication to generate sets of numbers; identify and describe any emerging patterns AC9M4N09	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										

Content descriptions	Units				Content descriptions	Units				Content descriptions	Units			
<b>Space</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Statistics</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Probability</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
represent and approximate composite shapes and objects in the environment, using combinations of familiar shapes and objects AC9M4SP01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	acquire data for categorical and discrete numerical variables to address a question of interest or purpose, using digital tools; represent data using many-to-one pictographs, column graphs and other displays or visualisations; interpret and discuss the information that has been created AC9M4ST01	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	describe possible everyday events and the possible outcomes of chance experiments and order outcomes or events based on their likelihood of occurring; identify independent or dependent events AC9M4P01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
create and interpret grid reference systems using grid references and directions to locate and describe positions and pathways AC9M4SP02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	analyse the effectiveness of different displays or visualisations in illustrating and comparing data distributions, then discuss the shape of distributions and the variation in the data AC9M4ST02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	conduct repeated chance experiments to observe relationships between outcomes; identify and describe the variation in results AC9M4P02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
recognise line and rotational symmetry of shapes and create symmetrical patterns and pictures, using dynamic geometric software where appropriate AC9M4SP03	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	conduct statistical investigations, collecting data through survey responses and other methods; record and display data using digital tools; interpret the data and communicate the results AC9M4ST03	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>					

General capabilities	Units			
	1	2	3	4
Critical and creative thinking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Digital literacy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ethical understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intercultural understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Literacy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Numeracy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Personal and social capability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cross-curriculum priorities	Units			
	1	2	3	4
Aboriginal and Torres Strait Islander histories and cultures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asia and Australia's engagement with Asia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustainability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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