

Year 6 Mathematics Curriculum and assessment plan

Example

Level description	Context and cohort considerations
<p>In Year 6, 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">• expand the repertoire of numbers they work with to include rational numbers and the use of integers in practical contexts such as locating points in the 4 quadrants of a Cartesian plane• extend their knowledge of factors and multiples to understand the properties of prime, composite and square numbers• solve arithmetic problems involving all 4 operations with natural numbers of any size• use mathematical modelling to solve practical problems, choosing models, representations and calculation strategies and justify solutions• apply computational approaches to develop algorithms that use rules to generate numbers• develop a range of written and digital means for representing objects and three-dimensional spaces in 2 dimensions• apply their understanding of area and use multiplicative thinking to establish the formula for the areas of a rectangle• begin to formally use deductive reasoning in spatial contexts involving lines and angles• describe and compare probabilities numerically• determine the mode and range and discuss the shape of distributions in their reports of findings from their statistical investigations• observe and compare long-run frequencies in repeated chance experiments and simulations.	<p>The Year 6 cohort participates in daily mathematics learning. This plan has considered:</p> <ul style="list-style-type: none">• summative and formative data from Year 5 showing the need to support and extend on students’ emerging measurement and fractional understandings• exploration and use of digital tools (e.g. virtual material, electronic devices, simulation programs and dynamic geometric software) in relevant contexts, which supports the learning and doing of mathematics. <p>Across the year, the contexts for teaching and learning create authentic learning experiences for students. Unit 2 provides an opportunity to connect statistical investigations to support learning in the Science learning area. Unit 4 provides an opportunity to use the Year 6 graduation dinner party as a context for learning.</p>

Unit 1 — Discovering rules and patterns	Unit 2 — Creative connections	Unit 3 — Exploring possibilities	Unit 4 — Taking action to plan a party
Duration: 10 weeks	Duration: 10 weeks	Duration: 10 weeks	Duration: 10 weeks
<p>Students develop their critical and creative thinking skills when they interpret mathematical concepts or problems by breaking them into component parts for analysis. This analysis can then be used to develop rules and make generalisations. In order to develop this understanding of rules and generalisations, students explore the properties of numbers, number patterns and the formula for the area of a rectangle.</p> <p>In the first phase of this unit, students investigate the properties of prime, composite and square numbers by using their understanding of factors and multiples from Year 5. Students continue to build upon this knowledge as they use physical materials to identify and explain how rules can be used to create visually growing patterns, e.g. using toothpicks or counters to create growing patterns with triangles or squares to explore composite and square numbers. Number understandings are deepened as students investigate numerical equations involving brackets and combinations of operations. Students recognise the need for an agreed set of rules when carrying out multiple operations within the one number sentence. They use this understanding to find unknown values in equations and construct number sentences involving combinations of the four operations and brackets. Students then apply their understandings of the properties of numbers and operations by using computational thinking skills with function machines to model operations. The function machines show students’ ability to create algorithms with steps that generate sets of numbers.</p> <p>In the second phase of this unit, students use their understanding of multiplication and the properties of numbers to establish the formula for the area of a rectangle. Using one centimetre grid paper and the array structure, students draw a variety of rectangles and record the length of the sides and related areas of the rectangles. Through this exploration of relationships, students establish a formula for the area of a rectangle and make connections to why area is measured in squared units.</p> <p>Evidence of student learning from investigations throughout the unit is recorded in an investigation folio, e.g. annotated visually growing patterns, diagrams, number equations, explanations, function machine models, area of a rectangle representations.</p>	<p>When students consider approaches to mathematical problems, they develop flexible thinking as ideas are tested and trialled, and adjustments are made. Creative approaches also encourage connections between concepts and across learning areas. This unit provides opportunities to make connections between decimal representations and the metric system, integers on number lines and as coordinates on the Cartesian plane, and examine a statistical investigation within a Science context.</p> <p>In the first phase of this unit, students make connections between mathematical concepts by reviewing decimal number system understandings from Year 5 and applying this knowledge to add and subtract decimals and multiply and divide decimals by multiples of powers of 10. Students connect decimal representations to the metric system and use their proficiency with metric units from Year 5 to convert between common units of length, mass and capacity, considering the most appropriate unit to use in calculations. Students further establish mathematical connections by expanding their repertoire of numbers to include integers. They extend the number line to include negative numbers and explore practical contexts that include positive and negative integers, e.g. exploring elevators above and below ground level. Students then explore integers as coordinates on the Cartesian plane to make the connection that axes are number lines to locate points in the four quadrants of a Cartesian plane. Through practical explorations, students develop an understanding that the Cartesian plane provides a visual way of describing location, e.g. through playing games such as battleship and listing coordinates in the correct order to draw polygons. Evidence of student learning is collected in a supervised assessment task.</p> <p>In the second phase of this unit, in response to stimulus, students build on Year 5 understandings to interpret and compare data sets for ordinal and nominal categorical, discrete and continuous numerical variables using comparative displays or visualisations, e.g. dot plots, bar graphs, side-by-side column graphs. Digital literacy skills are developed as students analyse data and compare distributions in terms of mode, range and shape to identify patterns. They investigate data representations in the media and discuss how distributions illustrate and convey messages. Students then make connections between Mathematics and Science in a statistical investigation on how the growth and survival of plants is affected by changing the physical conditions. Students draw on their understandings of number and length to collect, record and represent continuous numerical data by measuring the height of plants over time. Using digital tools, students tabulate data and communicate findings with a line graph. Evidence of student learning is collected in a learning journal.</p>	<p>When exploring possible approaches it is important to change, combine or elaborate on ideas to find solutions. Digital tools can be used to select and control a variety of features to create digital content and communicate creative solutions. In this unit, students develop digital literacy skills in probability and spatial contexts.</p> <p>In the first phase of this unit, students apply their understandings of factors and multiples from Unit 1 to fraction denominators, e.g. thirds, sixths, ninths, twelfths. They explore equivalent representations of fractions (e.g. number lines, drawings and models), use their understanding of factors and multiples to make comparisons between these representations and explain the relationship between related denominators. Students then apply their understanding of fractions, decimals and percentage equivalents from Year 5 to multiple probability experiments within a project. Throughout the investigation report students compare outcomes recorded as common fractions and add and subtract fractions with related denominators using their understanding of equivalent fractions. Students assign probabilities and run simulations using digital tools, comparing observed frequencies to expected frequencies. They discuss how increasing the number of trials effects variation in results. Evidence of student learning will be demonstrated in their investigation report.</p> <p>In the second phase of the unit, students continue to explore possibilities in spatial contexts and build upon their prior knowledge of angles from Year 5. Students investigate parallel cross-sections of objects through hands-on experiences by slicing through models at different angles, e.g. vegetables or fruit, play dough models or foam objects. They observe and record the faces from different cross-sections by taking photographs and making annotations in a digital investigation folio. Students learn when making a cross-section cut parallel to the congruent end faces in a right prism, the cross-section is congruent to the end face. Hence, the naming convention for right prisms is according to these two congruent faces. Students then apply angle knowledge to identify the relationships between angles on a straight line, angles at a point and vertically opposite angles. In their digital folio, students create spatial representations and use number sentences to demonstrate their understanding of angle properties and how they are used to find unknown angles. Students then explore possibilities with transformations. They use their digital literacy skills to creatively combine transformations to design a logo with dynamic geometric software. Students communicate their spatial learning through a digital folio using multimedia.</p>	<p>Realistic and engaging contexts support students to make predictions, test ideas and evaluate options when solving practical problems. In this unit students use mathematical modelling to take action when planning their graduation dinner event.</p> <p>In the first phase of this unit, students draw on multiplicative thinking from Unit 1 and fractional knowledge from Units 2 and 3 to explore finding a familiar fraction, decimal or percentage of a quantity. They make links between percentages and their decimal equivalents, e.g. 30% discount is equivalent to 0.3, which can be calculated by dividing the amount by 10 and multiplying the result by 3. Students also explore calculating fractions of quantities, e.g. recognising $\frac{2}{3}$ can be calculated by dividing the quantity by 3 and multiplying the result by 2. Students then apply this knowledge, as critical and creative thinkers, to consider the costing of their graduation dinner. Through a project, students use the mathematical modelling process to work systematically to review menu options and apply their knowledge of rational numbers (i.e. fractions and decimals) and percentages to determine potential costs. Digital tools such as calculators and spreadsheets may support students to record their calculations. Students use estimation, rounding and calculation strategies to formulate possible solutions for catering for the event for the Year 6 cohort and when considering the reasonableness of results. Students communicate solutions, including a possible ticket price that meets a specific budget for the graduation dinner.</p> <p>In the second phase of this unit, students take action to plan a travel itinerary for the invited guests for their graduation dinner. They create a schedule (or timetable) for the graduation dinner based on their duration calculations, and researched travel times for invited guests (with estimations calculated by using a digital mapping tool). Students advise the guests on their expected travel times and suggested arrival times, so they do not arrive late for the event. Each guest is provided with a personalised timetable for the evening.</p>

	Unit 1 — Discovering rules and patterns		Unit 2 — Creative connections		Unit 3 — Exploring possibilities		Unit 4 — Taking action to plan a party	
	Assessment 1 — Project: Involving computational thinking	Term/ week	Assessment 2 — Supervised assessment	Term/ week	Assessment 4 — Project: Probability experiments and simulation	Term/ week	Assessment 6 — Project: Mathematical modelling	Term/ week
Assessment	<p>Description: Through an investigation folio, a collection of responses from practical investigations is collated. The investigation folio shows evidence of students’ learning, focusing on:</p> <ul style="list-style-type: none">• using the properties of prime, composite and square numbers to solve problems where they create visually growing patterns• identifying and explaining rules used to create growing patterns• finding unknown values in numerical equations involving combinations of arithmetic operations• using computational thinking skills with function machines to model operations• creating and using algorithms to generate sets of numbers, using a rule with function machines• using the formula for the area of a rectangle to solve problems. <p>Technique: Project</p> <p>Mode: Written</p> <p>Conditions:</p> <ul style="list-style-type: none">• started in Week 4 and completed over multiple lessons by end of Week 8	Term 1 Week 8	<p>Description: Students respond to questions, scenarios or problems that involve:</p> <ul style="list-style-type: none">• using integers to represent points on a number line and in the Cartesian plane• locating ordered pairs in any one of the four quadrants on the Cartesian plane• using all four operations with decimals and connecting decimal representations of measurements to the metric system• converting between common units of length, mass and capacity. <p>Technique: Supervised assessment</p> <p>Mode: Written</p> <p>Conditions:</p> <ul style="list-style-type: none">• up to 60 minutes, plus 5 minutes perusal and/or planning time• may be completed over multiple lessons or broken into components in Week 4	Term 2 Week 4	<p>Description: Students plan and conduct multiple repeated chance experiments using digital tools, to run simulations and collect data. They communicate their findings in an investigation report, showing evidence of:</p> <ul style="list-style-type: none">• assigning probabilities using common fractions, decimal and percentages• ordering common fractions, giving reasons• adding and subtracting fractions with related denominators• generating and recording the outcomes from many trials of a chance experiment• comparing observed frequencies to the expected frequencies of the outcomes of chance experiments. <p>Technique: Project</p> <p>Mode: Multimodal (written and practical with materials and digital tools to conduct chance experiments)</p> <p>Conditions:</p> <ul style="list-style-type: none">• completed over multiple lessons in Week 5• practical responses are observed by the teacher	Term 3 Week 5	<p>Part A</p> <p>Description: Students use mathematical modelling to create a proposal of the best menu options and possible ticket price that meets a specific budget for the graduation dinner. Students demonstrate their proficiency when:</p> <ul style="list-style-type: none">• using mathematical modelling to solve financial and other practical problems involving percentages and rational numbers• formulating and solving the problem, involving finding a fraction, decimal or percentage of a quantity• using estimation to find approximate solutions to problems involving rational numbers and percentages• justifying choices. <p>Part B</p> <p>Description: In this task students plan personalised travel itineraries and timetables for invited guests. They consider start and finish times and duration of events. Students provide their invited guests with a personalised timetable for the evening.</p> <p>Technique: Project</p> <p>Mode: Written</p> <p>Conditions:</p> <ul style="list-style-type: none">• started in Week 5 and completed over multiple lessons by end of Week 7• written responses up to 400 words	Term 4 Week 7

Unit 1 — Discovering rules and patterns			Unit 2 — Creative connections		Unit 3 — Exploring possibilities		Unit 4 — Taking action to plan a party	
Assessment			Assessment 3 — Project: Statistical investigations	Term/ week	Assessment 5 — Project	Term/ week		
			<p>Description: Through a series of statistical investigations, students record responses to stimulus and questions in a learning journal (e.g. data representations and visualisations, written descriptions) to demonstrate evidence of:</p> <ul style="list-style-type: none">• comparing distributions of discrete and continuous numerical and ordinal categorical data sets• critiquing arguments presented in the media based on statistics• planning and conducting a statistical investigation connected to the Science learning area on how the growth and survival of plants is affected by changing the physical conditions. <p>Technique: Project</p> <p>Mode: Written (using digital tools where appropriate)</p> <p>Conditions:</p> <ul style="list-style-type: none">• started in Week 5 and completed over multiple lessons by end of Week 9• written responses up to 400 words	Term 2 Week 9	<p>Description: Students keep a digital investigation folio (e.g. photographs/diagrams, spatial representations with number sentences, logo design) in response to a series of spatial investigations. The digital folio shows samples of students' learning focusing on:</p> <ul style="list-style-type: none">• identifying the parallel cross-section for right prisms from hands-on investigations involving slicing models at different angles• using angle properties to create spatial representations and find unknown angles• creating tessellating patterns in logo designs using combinations of transformations. <p>Technique: Project</p> <p>Mode: Written (using digital tools, e.g. dynamic geometric software and photographs with annotations)</p> <p>Conditions:</p> <ul style="list-style-type: none">• started in Week 6 and completed over multiple lessons by end of Week 10	Term 3 Week 10		

	Unit 1 — Discovering rules and patterns	Unit 2 — Creative connections	Unit 3 — Exploring possibilities	Unit 4 — Taking action to plan a party
Achievement standard	<p>By the end of Year 6, students use integers to represent points on a number line and in the Cartesian plane. They solve problems using the properties of prime, composite and square numbers. Students order common fractions, giving reasons, and add and subtract fractions with related denominators. They use all 4 operations with decimals and connect decimal representations of measurements to the metric system. Students 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. They use mathematical modelling to solve financial and other practical problems involving percentages and rational numbers, formulating and solving the problem, and justifying choices. Students find unknown values in numerical equations involving combinations of arithmetic operations. They identify and explain rules used to create growing patterns. Students create and use algorithms to generate sets of numbers, using a rule.</p> <p>They interpret and use timetables. Students convert between common units of length, mass and capacity. They use the formula for the area of a rectangle and angle properties to solve problems. Students identify the parallel cross-section for right prisms. They create tessellating patterns using combinations of transformations. Students locate an ordered pair in any one of the 4 quadrants on the Cartesian plane.</p> <p>They compare distributions of discrete and continuous numerical and ordinal categorical data sets as part of their statistical investigations, using digital tools. Students critique arguments presented in the media based on statistics. They assign probabilities using common fractions, decimal and percentages. Students conduct simulations using digital tools, to generate and record the outcomes from many trials of a chance experiment. They compare observed frequencies to the expected frequencies of the outcomes of chance experiments.</p>	<p>By the end of Year 6, students use integers to represent points on a number line and in the Cartesian plane. They solve problems using the properties of prime, composite and square numbers. Students order common fractions, giving reasons, and add and subtract fractions with related denominators. They use all 4 operations with decimals and connect decimal representations of measurements to the metric system. Students 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. They use mathematical modelling to solve financial and other practical problems involving percentages and rational numbers, formulating and solving the problem, and justifying choices. Students find unknown values in numerical equations involving combinations of arithmetic operations. They identify and explain rules used to create growing patterns. Students create and use algorithms to generate sets of numbers, using a rule.</p> <p>They interpret and use timetables. Students convert between common units of length, mass and capacity. They use the formula for the area of a rectangle and angle properties to solve problems. Students identify the parallel cross-section for right prisms. They create tessellating patterns using combinations of transformations. Students locate an ordered pair in any one of the 4 quadrants on the Cartesian plane.</p> <p>They compare distributions of discrete and continuous numerical and ordinal categorical data sets as part of their statistical investigations, using digital tools. Students critique arguments presented in the media based on statistics. They assign probabilities using common fractions, decimal and percentages. Students conduct simulations using digital tools, to generate and record the outcomes from many trials of a chance experiment. They compare observed frequencies to the expected frequencies of the outcomes of chance experiments.</p>	<p>By the end of Year 6, students use integers to represent points on a number line and in the Cartesian plane. They solve problems using the properties of prime, composite and square numbers. Students order common fractions, giving reasons, and add and subtract fractions with related denominators. They use all 4 operations with decimals and connect decimal representations of measurements to the metric system. Students 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. They use mathematical modelling to solve financial and other practical problems involving percentages and rational numbers, formulating and solving the problem, and justifying choices. Students find unknown values in numerical equations involving combinations of arithmetic operations. They identify and explain rules used to create growing patterns. Students create and use algorithms to generate sets of numbers, using a rule.</p> <p>They interpret and use timetables. Students convert between common units of length, mass and capacity. They use the formula for the area of a rectangle and angle properties to solve problems. Students identify the parallel cross-section for right prisms. They create tessellating patterns using combinations of transformations. Students locate an ordered pair in any one of the 4 quadrants on the Cartesian plane.</p> <p>They compare distributions of discrete and continuous numerical and ordinal categorical data sets as part of their statistical investigations, using digital tools. Students critique arguments presented in the media based on statistics. They assign probabilities using common fractions, decimal and percentages. Students conduct simulations using digital tools, to generate and record the outcomes from many trials of a chance experiment. They compare observed frequencies to the expected frequencies of the outcomes of chance experiments.</p>	<p>By the end of Year 6, students use integers to represent points on a number line and in the Cartesian plane. They solve problems using the properties of prime, composite and square numbers. Students order common fractions, giving reasons, and add and subtract fractions with related denominators. They use all 4 operations with decimals and connect decimal representations of measurements to the metric system. Students 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. They use mathematical modelling to solve financial and other practical problems involving percentages and rational numbers, formulating and solving the problem, and justifying choices. Students find unknown values in numerical equations involving combinations of arithmetic operations. They identify and explain rules used to create growing patterns. Students create and use algorithms to generate sets of numbers, using a rule.</p> <p>They interpret and use timetables. Students convert between common units of length, mass and capacity. They use the formula for the area of a rectangle and angle properties to solve problems. Students identify the parallel cross-section for right prisms. They create tessellating patterns using combinations of transformations. Students locate an ordered pair in any one of the 4 quadrants on the Cartesian plane.</p> <p>They compare distributions of discrete and continuous numerical and ordinal categorical data sets as part of their statistical investigations, using digital tools. Students critique arguments presented in the media based on statistics. They assign probabilities using common fractions, decimal and percentages. Students conduct simulations using digital tools, to generate and record the outcomes from many trials of a chance experiment. They compare observed frequencies to the expected frequencies of the outcomes of chance experiments.</p>
Moderation	<p>Consensus:</p> <p>Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area.</p>	<p>Calibration:</p> <p>Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area.</p>	<p>Expert:</p> <p>Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area.</p>	<p>Calibration:</p> <p>Refer to QCAA moderation advice on the QCAA website under the Assessment tab in the learning area.</p>

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 situations, including financial contexts, that use integers; locate and represent integers on a number line and as coordinates on the Cartesian plane AC9M6N01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	recognise and use rules that generate visually growing patterns and number patterns involving rational numbers AC9M6A01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	convert between common metric units of length, mass and capacity; choose and use decimal representations of metric measurements relevant to the context of a problem AC9M6M01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
identify and describe the properties of prime, composite and square numbers and use these properties to solve problems and simplify calculations AC9M6N02	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	find unknown values in numerical equations involving brackets and combinations of arithmetic operations, using the properties of numbers and operations AC9M6A02	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	establish the formula for the area of a rectangle and use it to solve practical problems AC9M6M02	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
apply knowledge of equivalence to compare, order and represent common fractions including halves, thirds and quarters on the same number line and justify their order AC9M6N03	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	create and use algorithms involving a sequence of steps and decisions that use rules to generate sets of numbers; identify, interpret and explain emerging patterns AC9M6A03	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	interpret and use timetables and itineraries to plan activities and determine the duration of events and journeys AC9M6M03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
apply knowledge of place value to add and subtract decimals, using digital tools where appropriate; use estimation and rounding to check the reasonableness of answers AC9M6N04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						identify the relationships between angles on a straight line, angles at a point and vertically opposite angles; use these to determine unknown angles, communicating reasoning AC9M6M04	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
solve problems involving addition and subtraction of fractions using knowledge of equivalent fractions AC9M6N05	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
multiply and divide decimals by multiples of powers of 10 without a calculator, applying knowledge of place value and proficiency with multiplication facts; using estimation and rounding to check the reasonableness of answers AC9M6N06	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
solve problems that require finding a familiar fraction, decimal or percentage of a quantity, including percentage discounts, choosing efficient calculation strategies and using digital tools where appropriate AC9M6N07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
approximate numerical solutions to problems involving rational numbers and percentages, including financial contexts, using appropriate estimation strategies AC9M6N08	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
use mathematical modelling to solve practical problems involving natural and rational numbers and percentages, including in financial contexts; formulate the problems, choosing operations and efficient calculation strategies, and using digital tools where appropriate; interpret and communicate solutions in terms of the situation, justifying the choices made AC9M6N09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										

Content descriptions	Units				Content descriptions	Units				Content descriptions	Units			
Space	1	2	3	4	Statistics	1	2	3	4	Probability	1	2	3	4
compare the parallel cross-sections of objects and recognise their relationships to right prisms AC9M6SP01	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	interpret and compare data sets for ordinal and nominal categorical, discrete and continuous numerical variables using comparative displays or visualisations and digital tools; compare distributions in terms of mode, range and shape AC9M6ST01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	recognise that probabilities lie on numerical scales of 0 – 1 or 0% – 100% and use estimation to assign probabilities that events occur in a given context, using common fractions, percentages and decimals AC9M6P01	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
locate points in the 4 quadrants of a Cartesian plane; describe changes to the coordinates when a point is moved to a different position in the plane AC9M6SP02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	identify statistically informed arguments presented in traditional and digital media; discuss and critique methods, data representations and conclusions AC9M6ST02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	conduct repeated chance experiments and run simulations with an increasing number of trials using digital tools; compare observations with expected results and discuss the effect on variation of increasing the number of trials AC9M6P02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
recognise and use combinations of transformations to create tessellations and other geometric patterns, using dynamic geometric software where appropriate AC9M6SP03	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	plan and conduct statistical investigations by posing and refining questions or identifying a problem and collecting relevant data; analyse and interpret the data and communicate findings within the context of the investigation AC9M6ST03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" 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 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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