

Australian Curriculum Version 9: Mathematics

Year 5 — Example Year level plan

The [K–12 Curriculum, assessment and reporting framework](#) (K–12 Framework) requires schools to document, retain, and monitor or review their three levels of planning. The Example planning shows effective coverage of the [AC V9 Mathematics. Year and Band planning templates](#) are available to support schools if they choose to adapt the Example planning to suit their local context.

Sequence of units	Semester 1		Semester 2	
	Unit 1	Unit 2	Unit 3	Unit 4
Unit topics	Number, Space, Statistics	Number, Algebra, Measurement	Number, Space, Measurement	Number, Algebra, Probability
Unit description	Students further develop proficiency and positive dispositions towards mathematics and its use as they: <ul style="list-style-type: none">use a range of physical and virtual materials and apply understanding of relationships to convert between forms of numbers, units and spatial representations especially with fractions and decimalsuse materials, diagrams or arrays to become efficient with multiplication factslocate and move positions within a grid coordinate system to pinpoint specific locationsrecognise what stays the same and what changes when shapes undergo transformationsuse physical materials and dynamic geometric software to perform transformationsplan and conduct a statistical investigation that involves a range of data sets including nominal and ordinal categorical and discrete numerical data; report findings and interpret and compare data representations to make informed decisions.	Students further develop proficiency and positive dispositions towards mathematics and its use as they: <ul style="list-style-type: none">use physical and virtual materials to experiment with factors and multiplesuse materials, diagrams or arrays to find unknowns in numerical equations involving multiplication and divisionbuild fluency and understanding of multiplication facts.develop efficient strategies to multiply and divideuse mathematical modelling to solve financial problems, involving natural numbers and operations, and report on insights and conclusions reacheduse estimation strategies to check the reasonableness of calculations when solving problemsapply an understanding of relationships to convert between 12- and 24-hour time when solving practical problems.	Students further develop proficiency and positive dispositions towards mathematics and its use as they: <ul style="list-style-type: none">use common percentages to make proportional comparisons of quantities in everyday contextsapply understanding of fractions to compare and order them, and solve problems involving addition and subtraction of fractions with the same or related denominatorsuse mathematical modelling to solve practical problems using natural numbers and operations, and report on insights and conclusionsapply an understanding of relationships between objects and two-dimensional nets by constructing a variety of objectssolve practical problems involving perimeter and area of regular and irregular spaces using appropriate metric unitsdecide on the appropriate unit when measuring length, mass and capacity of objectsuse appropriate instruments such as protractors and digital tools to construct and measure angles in degrees.	Students further develop proficiency and positive dispositions towards mathematics and its use as they: <ul style="list-style-type: none">use place value to order decimalsuse algorithms and digital tools to experiment with factors and multiples to identify and explain patternsuse multiplication facts and efficient calculation strategies to build fluency in multiplying large numbers by one and two-digit numbers and divide by single digit numbersfind unknowns in numerical equations involving multiplication and division using materials, diagrams, number sentences and arraysdevelop reasoning skills when considering relationships between events and connecting long-term frequency over many trials to the likelihood of an event occurring.

Assessment		Unit 1	Unit 2	Unit 3	Unit 4
		Assessment task 1.1 — <i>Space</i>	Assessment task 2.1 — <i>Number and Mathematical modelling</i>	Assessment task 3.1 — <i>Number and Mathematical modelling</i>	Assessment task 4.1 — <i>Number, Algebra and Computational thinking</i>
Assessable elements		Understanding and Fluency	Understanding and Fluency, Problem-solving	Understanding and Fluency, Problem-solving	Understanding and Fluency, Problem-solving
Range and balance of assessment conventions ¹	Technique	Short response	Short response Project	Short response Project	Test/Examination
	Mode	<input checked="" type="checkbox"/> Written	<input checked="" type="checkbox"/> Written	<input checked="" type="checkbox"/> Written	<input checked="" type="checkbox"/> Written
	Conditions	<input checked="" type="checkbox"/> Access to resources <input checked="" type="checkbox"/> Individual task Have you considered: <input type="checkbox"/> Time considerations <input type="checkbox"/> Word length <input type="checkbox"/> Accessibility for all students	<input checked="" type="checkbox"/> Access to resources <input checked="" type="checkbox"/> Individual task Have you considered: <input type="checkbox"/> Time considerations <input type="checkbox"/> Word length <input type="checkbox"/> Accessibility for all students	<input checked="" type="checkbox"/> Access to resources <input checked="" type="checkbox"/> Individual task Have you considered: <input type="checkbox"/> Time considerations <input type="checkbox"/> Word length <input type="checkbox"/> Accessibility for all students	<input checked="" type="checkbox"/> Access to resources <input checked="" type="checkbox"/> Individual task Have you considered: <input type="checkbox"/> Time considerations <input type="checkbox"/> Word length <input type="checkbox"/> Accessibility for all students

Assessment		Unit 1	Unit 2	Unit 3	Unit 4
		Assessment task 1.2 — <i>Statistics and Statistical investigations</i>		Assessment task 3.2 — <i>Measurement and Space</i>	Assessment task 4.2 — <i>Probability and Probability experiments and simulations</i>
Assessable elements		Understanding and Fluency, Problem-solving and Reasoning		Understanding and Fluency	Problem-solving and Reasoning
Range and balance of assessment conventions ¹	Technique	Short response Statistical investigation		Test/Examination	Probability experiment and simulation
	Mode	<input checked="" type="checkbox"/> Written <input checked="" type="checkbox"/> Practical		<input checked="" type="checkbox"/> Written <input checked="" type="checkbox"/> Practical	<input checked="" type="checkbox"/> Written <input checked="" type="checkbox"/> Practical
	Conditions	<input checked="" type="checkbox"/> Access to resources <input checked="" type="checkbox"/> Individual task Have you considered: <input type="checkbox"/> Time considerations <input type="checkbox"/> Word length <input type="checkbox"/> Accessibility for all students		<input checked="" type="checkbox"/> Access to resources <input checked="" type="checkbox"/> Individual task Have you considered: <input type="checkbox"/> Time considerations <input type="checkbox"/> Word length <input type="checkbox"/> Accessibility for all students	<input checked="" type="checkbox"/> Access to resources <input checked="" type="checkbox"/> Individual task Have you considered: <input type="checkbox"/> Time considerations <input type="checkbox"/> Word length <input type="checkbox"/> Accessibility for all students

¹ For more information about Assessment conventions, navigate to Summative assessment tasks page on the Teaching and Learning Hub, <https://det-school.eq.edu.au/teachingandlearning/assessment/quality-assessment/summative-assessment-tasks>

Aspects of the achievement standard	Semester 1		Semester 2	
	Unit 1	Unit 2	Unit 3	Unit 4
Number and Algebra☼				
use place value to write and order decimals including decimals greater than one				Assessment task 4.1
express natural numbers as products of factors and identify multiples		Assessment task 2.1		
order and represent, add and subtract fractions with the same or related denominators			Assessment task 3.1	
represent common percentages and connect them to their fraction and decimal equivalents			Assessment task 3.1	
use their proficiency with multiplication facts and efficient calculation strategies to multiply large numbers by one- and two-digit numbers and divide by single-digit numbers				Assessment task 4.1
check the reasonableness of their calculations using estimation		Assessment task 2.1		
use mathematical modelling to solve financial and other practical problems, formulating and solving problems, choosing arithmetic operations and interpreting results in terms of the situation*		Assessment task 2.1	Assessment task 3.1	
apply properties of numbers and operations to find unknown values in numerical equations involving multiplication and division				Assessment task 4.1
create and use algorithms to identify and explain patterns in the factors and multiples of numbers				Assessment task 4.1
Measurement and Space☼				
choose and use appropriate metric units to measure the attributes of length, mass and capacity, and to solve problems involving perimeter and area			Assessment task 3.2	
convert between 12- and 24-hour time		Monitoring strategy		
estimate, construct and measure angles in degrees			Assessment task 3.2	
use grid coordinates to locate and move positions	Assessment task 1.1			
connect objects to their two-dimensional nets			Assessment task 3.2	
perform and describe the results of transformations and identify any symmetries	Assessment task 1.1			
Statistics and Probability☼				
plan and conduct statistical investigations that collect nominal and ordinal categorical and discrete numerical data using digital tools	Assessment task 1.2			
identify the mode and interpret the shape of distributions of data in context	Assessment task 1.2			
interpret and compare data represented in line graphs	Assessment task 1.2			
conduct repeated chance experiments, list the possible outcomes, estimate likelihoods and make comparisons between those with and without equally likely outcomes				Assessment task 4.2

*This aspect of the Achievement standard is assessed over two tasks.

[C2C Resource libraries](#) and resources in [AC V8 C2C units](#) may support teaching and learning of the updated curriculum.

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