



Australian Curriculum: Mathematics — Year 3

Year level plan-2023

Year 3 Level Description

The proficiency strands **understanding, fluency, problem-solving** and **reasoning** are an integral part of mathematics content across the three content strands: number and algebra, measurement and geometry, and statistics and probability. The proficiencies reinforce the significance of working mathematically within the content and describe how the content is explored or developed. They provide the language to build in the developmental aspects of the learning of mathematics. The achievement standards reflect the content and encompass the proficiencies.

At this year level:

- **understanding** includes connecting number representations with number sequences, partitioning and combining numbers flexibly, representing unit fractions, using appropriate language to communicate times, and identifying environmental symmetry
- **fluency** includes recalling multiplication facts, using familiar metric units to order and compare objects, identifying and describing outcomes of chance experiments, interpreting maps and communicating positions
- **problem-solving** includes formulating and modelling authentic situations involving planning methods of data collection and representation, making models of three-dimensional objects and using number properties to continue number patterns
- **reasoning** includes using generalising from number properties and results of calculations, comparing angles and creating and interpreting variations in the results of data collections and data displays.

CURRICULUM	SEMESTER 1		SEMESTER 2	
	Term 1	Term 2	Term 3	Term 4
Unit description	<p>Students develop understandings of:</p> <ul style="list-style-type: none"> • Number and place value — count to 1 000; investigate the 2s, 3s, 5s and 10s number sequences; identify odd and even numbers; represent three-digit numbers; compare and order three-digit numbers; partition numbers (standard and non-standard place value partitioning); recall addition facts and related subtraction facts; represent and solve addition problems; add two-digit, single-digit and three-digit numbers; subtract two-digit and three-digit numbers; represent multiplication; solve simple problems involving multiplication; recall multiplication number facts • Using units of measurement — tell time to five-minute intervals; identify one metre as a standard metric unit; represent a metre; measure with metres • Chance — conduct chance experiments; describe the outcomes of chance experiments; identify variations in the results of chance experiments • Data representation and interpretation — collect simple data; record data in lists and tables; display data in a column graph; interpret and describe outcomes of data investigations. • Fractions and decimals — describe fractions as equal portions or shares; represent halves, quarters and eighths of shapes and collections; represent thirds of shapes and collections 	<p>Students develop understandings of:</p> <ul style="list-style-type: none"> • Number and place value — compare and order three-digit numbers, partition three-digit numbers into place value parts, investigate 1 000, count to and beyond 1 000, use place value to add and subtract numbers, recall addition number facts, add and subtract three-digit numbers, add and subtract numbers eight and nine, solve addition and subtraction word problems, double and halve multiples of ten • Money and financial mathematics — count collections of coins and notes, make and match equivalent combinations, calculate change from simple transactions, solve a range of simple problems involving money • Patterns and algebra — infer pattern rules from familiar number patterns, identify and continue additive number patterns, identify missing elements in number patterns • Shape — identify and describe the features of familiar three-dimensional objects, make models of three-dimensional objects • Location and transformation — represent positions on a simple grid map, show full, half and quarter-turns on a grid map, describe positions in relation to key features, represent movement and pathways on a simple grid map • Location and transformation — describe and identify examples of symmetry in the environment, fold shapes and images to show symmetry, classify shapes as symmetrical and non-symmetrical. • Geometric reasoning — identify angles in the environment, construct angles with materials, compare the size of familiar angles in everyday situations • Fractions and decimals — represent and compare unit fractions, represent and compare unit fractions of shapes and collections, represent familiar unit fractions symbolically, solve simple problems involving, halves, thirds, quarters and eighths 	<p>Students develop understandings of:</p> <ul style="list-style-type: none"> • Number and place value — count and sequences beyond 1 000, represent, combine and partition three-digit and four-digit numbers flexibly, use place value to add (written strategy), represent multiplication as arrays and repeated addition, identify part-part-whole relationships in multiplication and division situations, add and subtract two-digit numbers and three-digit numbers, recall multiplication number facts, identify related division number facts, make models and use number sentences that represent problem situations, recall addition and subtraction facts, identify and describe the relationship between addition and subtraction, choose appropriate mental strategies to add and subtract • Money and financial mathematics — represent money amounts in different ways, compare values, count collections of coins and notes accurately and efficiently, choose appropriate coins and notes for shopping situations, calculate change and simple totals • Patterns and algebra — identify number patterns to 10 000, connect number representations with number patterns, use number properties to continue number patterns, identify pattern rules to find missing elements in patterns • Fractions and decimals — identify, represent and compare familiar unit fractions and their multiples (shapes, objects and collections), record fractions symbolically, recognise key equivalent fractions, solve simple problems involving fractions • Using units of measurement — measure, order and compare objects using familiar metric units of length, mass and capacity 	<p>Students develop understandings of:</p> <ul style="list-style-type: none"> • Number and place value — recall addition and related subtraction number facts, use number facts to add and subtract larger numbers, use part-part-whole thinking to interpret and solve addition and subtraction word problems, add and subtract using a written place value strategy, recall multiplication and related division facts, multiply two-digit numbers by single-digit multipliers, interpret and solve multiplication and division word problems • Money and financial mathematics — count the change required for simple transactions to the nearest five cents • Shape — make models of three-dimensional objects • Location and transformation — represent symmetry, interpret simple maps and plans • Geometric reasoning — identify angles as measures of turn, compare angle sizes in everyday situations • Chance — conduct chance experiments, make predictions based on data displays • Data representation and interpretation — identify questions of interest based on one categorical variable, gather data relevant to a question, organise and represent data, and interpret data displays. • Using units of measurement — use familiar metric units to order, compare and measure objects, and measure and record using metric units, explain measurement choices, measure length using part units and centimetres, represent time to the minute on digital and analog clocks, telling time to five minutes and minute, transfer knowledge of time to real-life contexts

ASSESSMENT		SEMESTER 1					SEMESTER 2				
		Term 1		Term 2			Term 3			Term 4	
		Representing, adding & subtracting numbers-AT1	Conduct chance experiment- AT2	Add, subtract, partition- AT3	Symmetry, 3D objects, angles- AT4	Investigate positions on maps- AT5	Length, mass, capacity-metric units-AT6	Patterning, addition, subtraction-AT7	Unit fractions, multiplication- AT8	Get right change- AT9	Telling time-AT10
Range and balance of summative assessment conventions	Technique	Test	Test	Test	Test	Investigation MGI	Test	Test	Test	Investigation MGI	Test
	Type of text	Short answer	Short answer Practical	Short answer	Short answer Practical	Project Practical	Short answer	Short answer	Short answer	Project	Short answer
	Mode	Written	Written	Written	Written	Written	Written	Written	Written	Written	Written
	Conditions	Individual	Individual	Test conditions Individual	Individual	Small groups	Individual	Individual	Individual	Individual test conditions	Small groups
Aspects of the achievement standard											
recognise the connection between addition and subtraction and solve problems using efficient strategies for multiplication	✓							✓			
model and represent unit fractions								✓			
represent money values in various ways									✓		
identify symmetry in the environment				✓							
match positions on maps with given information					✓						
recognise angles in real situations				✓							
interpret and compare data displays		✓									
count to and from 10 000	✓		✓								
classify numbers as either odd or even								✓			
recall addition and multiplication facts for single-digit numbers			✓					✓			
correctly count out change from financial transactions									✓		
continue number patterns involving addition and subtraction								✓			
use metric units for length, mass and capacity						✓					
tell time to the nearest minute											✓
make models of three-dimensional objects				✓							
conduct chance experiments and list possible outcomes		✓									
conduct simple data investigations for categorical variables		✓									

Term 1 Term 2 Term 3 Term 4 ✓ indicates opportunities that summative assessments provide for students to demonstrate evidence against aspects of the achievement standard