

Australian Curriculum: Mathematics — Year 2

Year level plan-2023

Year 2 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 calculations with counting sequences, partitioning and combining numbers flexibly and identifying and describing the relationship between addition and subtraction and between multiplication and division
- **fluency** includes readily counting numbers in sequences, using informal units iteratively to compare measurements, using the language of chance to describe outcomes of familiar chance events and describing and comparing time durations
- **problem-solving** includes formulating problems from authentic situations, making models and using number sentences that represent problem situations, and matching transformations with their original shape
- **reasoning** includes using known facts to derive strategies for unfamiliar calculations, comparing and contrasting related models of operations and creating and interpreting simple representations of data.

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 collections in groups of ten; represent two-digit numbers; read and write two-digit numbers; connect two-digit number representations; partition two-digit numbers; use the twos, fives and tens counting sequence; investigate twos, fives and tens number sequences; represent addition and subtraction; use part-part-whole relationships to solve problems; connect part-part-whole understanding to number facts; recall addition number facts; add strings of single-digit numbers; add two-digit numbers; represent multiplication and division; solve simple multiplication and division problems • Using units of measurement — order days of the week and months of the year, use calendars to record and plan significant events, connect seasons to the months of the year, compare lengths using direct comparison, compare lengths using indirect comparison, measure and compare lengths using non-standard units • Chance — identify everyday events that involve chance; describe chance outcomes; describe events as likely, unlikely, certain, impossible • Data representation and interpretation — collect simple data, record data in lists and tables, display data in a picture graph, describe outcomes of data investigations. • Shape — recognise and name familiar two-dimensional shapes, describe the features of two-dimensional shapes, draw two-dimensional shapes and describe the features of familiar three-dimensional objects 	<p>Students develop understandings of:</p> <ul style="list-style-type: none"> • Number and place value — recall addition and subtraction number facts, represent two-digit numbers, partition two-digit numbers into place value parts, represent addition situations, describe part-part-whole relationships, add and subtract single- and two-digit numbers, solve addition and subtraction problems, represent multiplication, represent division, solve simple grouping and sharing problems • Fractions and decimals — represent halves, quarters and eighths of shapes, describe the connection between halves, quarters and eighths, and solve simple number problems involving halves, quarters and eighths • Money and financial mathematics — describe the features of Australian coins, count coin collections, identify equivalent combinations, identify \$5 and \$10 notes, count small collections of coins and notes • Patterns and algebra — identify the threes counting sequence, describe number patterns, identify missing elements in counting patterns, and solve simple number pattern problems • Using units of measurement — identify the number of days in each month, relate months to seasons, tell time to the quarter hour, compare and order area of shapes and surfaces, cover surfaces to represent area, measure area with informal units • Location and transformation — interpret simple maps of familiar locations, describe 'bird's-eye view', use appropriate language to describe locations, use simple maps to identify locations of interest. 	<p>Students develop understandings of:</p> <ul style="list-style-type: none"> • Number and place value — count to and from 1 000, represent three-digit numbers, compare and order three-digit numbers, partition three-digit numbers, read and write three-digit numbers, recall addition number facts, identify related addition and subtraction number facts, add and subtract with two-digit numbers, represent multiplication and division, use multiplication to solve problems and count large collections • Fractions and decimals — divide shapes and collections into, quarters and eighths, solve simple fraction problems • Money and financial mathematics — count collections of coins and notes, make and compare money amounts, read and write money amounts • Using units of measurement — compare and order objects, measure length, area and capacity using informal units, identify purposes for calendars and explore seasons and calendars • Location and transformation — describe the effect of one-step transformations, including turns, flips and slides, identify turns, flips and slides in real-world situations. 	<p>Students develop understandings of:</p> <ul style="list-style-type: none"> • Number and place value — recall addition and subtraction number facts, use the inverse relationship, identify compatible numbers, add single-digit and two-digit numbers, add three-digit numbers and subtract two-digit numbers, identify related addition and subtraction facts, use place value to solve addition and subtraction problems • Fractions and decimals — identify halves, quarter and eighths of shapes and collections • Patterns and algebra — describe number patterns, investigate addition pattern sequences • Using units of measurement — directly compare mass of objects; use informal units to measure mass, length, area and capacity of objects and shapes; compare and order objects and shapes based on a single attribute; tell time to the quarter-hour • Location and transformation — identify half and quarter turns, represent flips and slides, interpret simple maps • Chance — predict the likelihood of an event based on data • Data representation and interpretation — use data to answer questions, represent data.

ASSESSMENT		SEMESTER 1					SEMESTER 2					
		Term 1		Term 2			Term 3			Term 4		
		2D shapes & 3D objects- AT1	Counting & calculating to 1000- AT2	Number patterns/ Telling time- AT3	Counting, multiplying and dividing-AT4	Explaining transformations- AT5	Using calendars-AT6	Representing data and chance-AT7	Can you measure me? -AT8	Value of money / addition & subtraction- AT9	Investigating maps- AT10	Collecting & representing data- AT11
Range and balance of summative assessment conventions	Technique	MGI Investigation	Test	Test	Test	Investigation MGI	Investigation MGI	Test	Investigation MGI	Test	Investigation MGI	Test
	Type of text	Project	Short answer	Short answer	Short answer	Project	Project	Short answer	Project	Short answer	Project	Short answer
	Mode	Spoken/written	Written	Written	Written	Spoken/written	Spoken/written	Written	Spoken/written	Written	Spoken/written	Written
	Conditions	Pairs or small group	Individual	Individual	Individual	Pairs or small group	Pairs or small group	Individual	Individual	Individual	Pairs or small group	Individual
recognise increasing and decreasing number sequences involving 2s, 3s, 5s			✓									
represent multiplication and division by grouping into sets				✓								
associate collections of Australian coins with their value									✓			
identify the missing element in a number sequence			✓									
recognise the features of three-dimensional objects	✓											
interpret simple maps of familiar locations										✓		
explain the effects of one-step transformations					✓							
make sense of collected information												✓
count to and from 1000		✓		✓								
perform simple addition and subtraction calculations using a range of strategies		✓							✓			
divide collections and shapes into halves, quarters and eighths				✓								
order shapes and objects using informal units								✓				
tell time to the quarter-hour and use a calendar to identify the date and the months included in seasons			✓			✓						
draw two-dimensional shapes	✓											
describe outcomes for everyday events								✓				
collect, organise and represent data to make simple inferences												✓

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