

Years 3-6 Maths Curriculum map



1. Units



Years 3-6 Maths is formed of 9 units and this is the recommended sequence:

Unit	Recommended year group	Number of lessons
1. Place Value – four-digit numbers	Year 3	10
2. Exploring calculation strategies	Year 3	15
3. Using five-digit numbers	Year 4	10
4. Addition and subtraction	Year 4	15
5. Reasoning with large numbers	Year 5	15
6. Addition and subtraction problem solving	Year 5	10
7. Integers and decimals	Year 6	10
8. Fractions	Year 6	10
9. Missing Angles and Lengths	Year 6	5


- Units in **green** are complete and will be available at the start of Term 1, 2022.
- Units in **orange** are partially complete - lessons that are completed will be available at the start of Term 1 2022, with additional lessons added over the course of Term 1.
- Units in **black** will be available mid-Term 1.

2. Lessons

Year 3

Unit 1 Place Value

10 Lessons


Lesson	Lesson learning intention	Students will learn	 Australian CURRICULUM
1	Reading and writing 4 digit numbers	In this lesson, we will use place value charts and base ten blocks to help us read and write four digit numbers.	ACMNA052 ACMNA053
2	Partitioning numbers in different ways	In this lesson, we will partition numbers up to four digits in a variety of ways.	ACMNA052 ACMNA053
3	Ordering and comparing 4 digit numbers	In this lesson, we will order and compare four digit numbers using greater than and less than symbols.	ACMNA052 ACMNA053
4	Ordering 4 digit numbers using number lines	In this lesson, we will order and compare four digit numbers using number lines and place numbers from a table in ascending order of size.	ACMNA054 ACMNA055

5	Adding 10, 100 and 1000 to 4 digit numbers	In this lesson, we will add ten, one hundred and one thousand to a number, using base ten blocks and place value tables to help us. We will also add with regrouping.	
6	Subtracting 10, 100 and 1000 from 4 digit numbers	In this lesson, we will subtract ten, one hundred and one thousand from a number, using base ten blocks and place value tables to help us. We will also subtract with regrouping.	ACMNA052 ACMNA073
7	Rounding 3 and 4 digit numbers to the nearest 10 and 100	In this lesson, we will round both 3 and 4 digit numbers to the nearest 10 and 100. We will learn how to construct and use number lines appropriately to help us as a visual aid and find all the possible numbers that could have been rounded to a multiple of ten.	ACMNA052 ACMNA073
8	Applying place value knowledge to problem solving	In this lesson, we will investigate how to create the various 4 digit numbers with specific properties from the digits 0-9, such as the largest number, or a multiple of 10.	ACMNA052 ACMNA073 ACMNA054 ACMNA055
9	Finding solutions to a problem	In this lesson, we will use our knowledge of place value to solve different worded problems where we will have	ACMNA052 ACMNA073

		to select numbers that have certain properties from a set.	ACMNA054 ACMNA055
10	Place value application lesson	In this lesson, we will consolidate our understanding of place value, addition and subtraction from the previous lessons.	ACMNA052 ACMNA073 ACMNA054 ACMNA055

Unit 2 Exploring calculation strategies

15 Lessons

Lesson	Lesson learning intention	Students will learn	
1	Exploring Number Sense	In this lesson, we will link and apply known facts using number sense, and explore different visual representations of numbers and their properties.	ACMNA051 ACMNA052 ACMNA055
2	Deriving New Facts From Number Bonds (Part 1)	In this lesson, we will investigate and find new facts from number bonds. We will investigate the effect of adding and subtracting 1 to numbers in a calculation, and the effect of adjusting the place value of digits.	ACMNA060 ACMNA055
3	Number names	In this lesson, we will investigate the	ACMNA052

		ways in which the names of numbers change as we make adjustments to the digits, and compare written numbers with their names.	
4	Recognising the value of each digit in a 2 digit number	In this lesson, we will investigate the place value of each digit in two digit numbers. We will look at visual representations of the value of each digit.	ACMNA054 ACMNA055
5	Using comparative symbols to compare numbers	In this lesson, we will introduce the greater than, and less than symbols $>$ and $<$, and use them to accurately compare different numbers.	ACMNA052
6	Deriving New Facts From Number Bonds (Part 2)	In this lesson, we will look at the properties of addition and subtraction, including the law of commutativity. We will revisit place value and consider addition and subtraction as inverse operations.	ACMNA054 ACMNA055
7	Finding number bonds for numbers up to 20	In this lesson, we will be using number bonds and looking for patterns for numbers within 20. We will look at partitioning and part whole modelling.	ACMNA052
8	Applying number bonds within ten to add and subtract	In this lesson, we will be adding and subtracting 2 digit numbers without	ACMNA055


		regrouping by using our number bond knowledge and using visual representations of place value.	
9	Applying number bonds within twenty to add and subtract	In this lesson, we will be adding and subtracting 2 digit numbers with regrouping by using our number bond knowledge. We will use number lines to visualise the process.	ACMNA054 ACMNA055
10	Adding and subtracting using round and adjust	In this lesson, we we will add and subtract 2 digit numbers by using the round and adjust strategy whereby numbers are rounded to the nearest five or ten, then adjusted again at the end of the calculation.	ACMNA054 ACMNA055
11	Using round and adjust strategies to subtract and add near doubles	In this lesson, we will use round and adjust strategies to subtract and add near doubles. We will partition two digit numbers in order to make calculations easier.	ACMNA054 ACMNA055
12	Using an 'adding on' strategy to find the difference	In this lesson, we will use an 'adding on' strategy to find the difference between two numbers. We will use real life shopping examples and look at model solutions.	ACMNA054 ACMNA055
13	Using bar models to solve word	In this lesson, we will solve word	ACMNA054

	problems (Part 1)	problems using bar models as a visual tool to aid comparison between two values.	ACMNA055
14	Using bar models to solve word problems (Part 2)	In this lesson, we will solve word problems using bar models as a visual tool to aid addition and money problems involving change.	ACMNA054 ACMNA055
15	Application Lesson	In this lesson, we will apply all that we have learnt in this unit and practise answering different styles of questions involving addition and subtraction with modeled solutions.	ACMNA054 ACMNA055

Year 4

Unit 1 Using five-digit numbers

10 Lessons


Lesson	Lesson learning intention	Students will learn	 Australian CURRICULUM
1	Recognising the place value of each digit in a 5-digit number	In this lesson, we will look at 5-digit numbers, how to represent them in different ways and how to consider how many ten thousands, thousands, hundreds, tens and ones are in different numbers.	ACMNA072 ACMNA073
2	Ordering and comparing numbers beyond 10 000	In this lesson, we will look at how to work out whether a number is greater than or less than another number. We will also order and compare numbers.	ACMNA072 ACMNA073
3	Ordering and comparing a set of numbers beyond 10 000	In this lesson, we will look at how we can use place value to create the largest or smallest number. We will also compare and order two or more numbers.	ACMNA072 ACMNA073
4	Finding 10, 100, 1000 or 10 000 more than a given number	In this lesson, we will use our place value knowledge to find 10, 100, 1000 or 10 000 more than a given number and consider how the digits change when we are required to regroup.	ACMNA072 ACMNA073

5	Finding 10, 100, 1000 or 10 000 less than a given number	In this lesson, we will use our place value knowledge to find 10, 100, 1000 or 10 000 less than a given number and consider how the digits change when we are required to regroup.	ACMNA072 ACMNA073
6	Rounding numbers to the nearest 10	In this lesson, we will use counting sticks and number lines to record the two nearest multiples of 10, position a number on a number line and decide which is the closer multiple of 10 to the number.	ACMNA072 ACMNA073
7	Rounding numbers to the nearest 100	In this lesson, we will use counting sticks and number lines to record the two nearest multiples of 100, position a number on a number line and decide which is the closer multiple of 100 to the number.	ACMNA072 ACMNA073
8	Rounding numbers to the nearest 1000	In this lesson, we will use counting sticks and number lines to record the two nearest multiples of 1000, position a number on a number line and decide which is the closer multiple of 1000 to the number.	ACMNA072 ACMNA073
9	Finding the odd one out	In this lesson, we will find the odd one out by using our knowledge of place value and rounding.	ACMNA072 ACMNA073

10	Applying and consolidating: Reasoning with 5-digit numbers	In this lesson, we will apply and consolidate our knowledge of place value and rounding by recapping the key learning from previous lessons in the unit. We will then apply our learning to answer different questions.	ACMNA072 ACMNA073
-----------	--	---	----------------------

Unit 2 Addition and Subtraction

15 Lessons

Lesson	Lesson learning intention	Students will learn	
1	Deriving addition and subtraction facts	In this lesson, we will derive addition and subtraction facts by using part whole models to show how related facts can be derived from scaling up by 10, 100 or 1000.	ACMNA073
2	Deriving addition and subtraction facts by using given calculations	In this lesson, we will derive addition and subtraction facts by using given calculations, consider how the whole or parts have changed and the impact this has on the new calculation.	ACMNA073
3	Choosing appropriate addition strategies	In this lesson, we will look at addition equations and decide the best and most efficient strategy we could use to	ACMNA073


		solve them.	
4	Choosing appropriate subtraction strategies	In this lesson, we will look at subtraction equations and decide the best and most efficient strategy we could use to solve them.	ACMNA073
5	Applying and consolidating: Related number facts and appropriate strategies	In this lesson, we will apply and consolidate our knowledge of deriving related number facts and most efficient strategies for calculating addition and subtraction equations. We will recap our key learning and apply that learning to answer different questions.	ACMNA073
6	Adding using the column method	In this lesson, we will use the column method to add two four digit numbers where regrouping is required in one column.	ACMNA073
7	Adding using the column method, when multiple columns require regrouping	In this lesson, we will use the column method to add two four digit numbers where regrouping is required in multiple columns.	ACMNA073
8	Subtracting using the column method	In this lesson, we will use the column method to subtract two four digit numbers where regrouping is required in one column.	ACMNA073

9	Subtracting using the column method, when multiple columns require regrouping	In this lesson, we will use the column method to subtract two four digit numbers where regrouping is required in multiple columns.	ACMNA073
10	Subtracting from multiples of 1000	In this lesson, we will explore how to calculate from a multiple of 1000.	ACMNA073
11	Applying and consolidating: Column method for addition and subtraction	In this lesson, we will consolidate our knowledge of the column method for both addition and subtraction by recapping the method, completing examples and applying our learning.	ACMNA073
12	Representing one-step word problems	In this lesson, we will use bar models to represent addition and subtraction in one-step word problems.	ACMNA073
13	Representing comparison word problems	In this lesson, we will use comparison bar models to represent addition and subtraction in one-step word problems.	ACMNA073
14	Solving two-step word problems	In this lesson, we will use bar models to represent two-step addition and subtraction word problems.	ACMNA073
15	Applying and consolidating: Word problems and bar models	In this lesson, we will recap our knowledge of how to use bar models to represent word problems which require addition or subtraction.	ACMNA073

Year 5

Unit 1 Reasoning with large numbers


10 Lessons

Lesson	Lesson learning intention	Students will learn	 Australian CURRICULUM
1	Identifying the place value of the digits in 6-digit numbers	In this lesson, we will be representing 6-digit numbers pictorially using place value cards and base ten blocks. We will also learn how to partition 6-digit numbers.	
2	Comparing 6-digit numbers using inequalities	In this lesson, we will use place value charts to identify the value of digits in 6-digit numbers. We will also write inequality statements with 6-digit numbers.	
3	Ordering and comparing 6-digit numbers using number lines	In this lesson, we will be using number lines to order and compare numbers and placing 6-digit numbers on number lines with different scales.	ACMNA124
4	Rounding 6-digit numbers to the nearest 100 000 and 10 000	In this lesson, we will be using number lines to round 6-digit numbers to the nearest multiple of 100 000 and 10 000.	ACMNA099 ACMNA124

5	Rounding 6-digit numbers to the nearest 1000, 10 000 and 100 000	In this lesson, we will be using place value to round 6-digit numbers to the nearest multiple of 1000, 10 000 and 100 000.	ACMNA099 ACMNA124
6	Solving problems involving rounding	In this lesson, we will use knowledge of rounding to the nearest 1000, 10 000 and 100 000 to solve problems involving rounding.	ACMNA099
7	Solving problems involving place value and rounding	In this lesson, we will be applying our knowledge of place value and rounding to different problems using these strategies.	ACMNA099
8	Investigating Roman Numerals up to 100	In this lesson, we will be identifying the way to write the corresponding Roman numerals for values between 1 and 100.	
9	Investigating Roman Numerals up to 1000	In this lesson, we will be identifying the way to write the corresponding Roman numerals for values between 1 and 1000.	
10	Solving problems involving Roman Numerals	In this lesson, we will solve problems involving Roman numerals. Our focus will be on missing values in equations and correcting Roman numeral errors.	

Unit 2 Addition and Subtraction Problem Solving

10 Lessons


Lesson	Lesson learning intention	Students will learn	 Australian CURRICULUM
1	Using and explaining addition strategies	In this lesson, we will be learning how to use different addition strategies (e.g. partitioning, commutativity and rounding and adjusting) in order to solve magic squares.	ACMNA123 ACMNA151
2	Using and explaining addition and subtraction strategies	In this lesson, we will be learning how to use the most efficient addition and subtraction strategies. We will apply this knowledge to solving addition pyramids.	ACMNA123
3	Adding and subtracting using multiples of 10, 100, 1000, 10 000 and 100 000	In this lesson, we will learn how to use the 'derived facts' and 'make 10' strategies to solve equations involving multiples of 10, 100, 1000, 10 000 and 100 000.	ACMNA123
4	Adding and subtracting using the 'round and adjust' strategy	In this lesson, we will learn how to use the 'round and adjust' strategy to solve addition and subtraction equations.	ACMNA099 ACMNA123
5	Adding and subtracting using	In this lesson, we will use partitioning to	ACMNA123

	partitioning	add and subtract large integers, both where regrouping is required and where it is not needed.	
6	Rounding to estimate	In this lesson, we will apply our understanding of rounding to the nearest multiples of 10 000 and 1000 to estimate the answer to addition equations.	ACMNA099 ACMNA123
7	Adding using the column method	In this lesson, we will learn how to use the column method in order to solve addition equations.	ACMNA123
8	Subtracting using the column method	In this lesson, we will learn how to use the column method in order to solve subtraction equations. We will also learn how to represent equations using bar modelling.	ACMNA123
9	Problem solving using the column method	In this lesson, we will learn how to apply our understanding of the column method to finding and fixing errors and completing unfinished column method calculations.	ACMNA123
10	Solving multi-step addition and subtraction problems	In this lesson, we will be applying the addition and subtraction strategies that we have learned to word and real life problems.	ACMNA123

Year 6

Unit 1 Integers and Decimals

10 Lessons


Lesson	Lesson learning intention	Students will learn	
1	Understanding other powers of ten within one-million	In this lesson, pupils will begin to understand the magnitude of one million.	ACMNA124
2	Reading and writing 7-digit numbers	In this lesson pupils establish a relational understanding of the relative magnitude of one million. They will learn to read 7-digit numbers and practice writing them in words and numerals before applying their learning in a matching task.	ACMNA124
3	Understanding how the digits in a number indicate its structure	In this lesson, we will look closely at the digits in 7-digit numbers. We will gain an understanding of how they are composed and how they can be decomposed.	
4	Compare and order numbers to ten million	In this lesson, we will build on our understanding of numbers to 10 million through comparing and ordering	

		lists of numbers. Depth of understanding is demonstrated by moving fluently between different representations and by using them to justify comparison statements.	
5	Rounding to a required degree of accuracy	In this lesson, we will consider why estimates and rounding might be useful. We will explore rounding 7-digit numbers to the nearest multiple of 100,000 with varying degrees of accuracy.	
6	Estimating and rounding contexts	In this lesson, we will develop number sense as well as applying the skills of rounding and estimating linked to everyday situations.	
7	Strategies for addition	In this lesson, we will review a range of strategies to solve addition problems.	ACMNA123
8	Strategies for subtraction	In this lesson, we will review a range of strategies to solve subtraction problems.	ACMNA123
9	Applying addition and subtraction	In this lesson, we will practice representing decimal numbers and apply previous learning to solve addition and subtraction problems. We will use bar models and other	ACMNA123

		representations to help them make sense of the word problems, before applying calculation strategies to find the solution.	
10	Addition and subtraction problems	In this lesson, we will build on prior learning to develop a range of strategies to efficiently add and subtract within one problem.	ACMNA123

Unit 2 Fractions

10 Lessons


Lesson	Lesson learning intention	Students will learn	
1	To Identify, Describe and Represent Fractions	In this lesson, we will deepen our knowledge of fractions by looking at equivalent fractions and comparing and calculating with fractions. We will also explore different ways of representing fractions.	ACMNA125
2	Understanding Equivalence	In this lesson, we will be identifying equivalence using pictorial representations of fractions, then numerical representations and finally simplify fractions.	ACMNA131

3	Finding Equivalent Fractions	In this lesson, we will explore the relationship between the numerator and denominator (between and within fractions), find factors and reason about simplifying fractions.	ACMNA131
4	Compare Fractions Less than One	In this lesson, we will be comparing and ordering fractions less than one, using the most efficient strategy.	ACMNA125
5	Working with Fractions Greater than One	In this lesson, we will be exploring improper fractions and mixed numbers, including converting between the two.	ACMNA125
6	Adding fractions	In this lesson, we will be learning how to add fractions with different denominators and find term to term rules in fraction addition sequences.	ACMNA131
7	Subtracting fractions	In this lesson, we will be learning how to subtract fractions with different denominators and find term to term rules in fraction subtraction sequences.	ACMNA131
8	Decimal and fraction equivalence	In this lesson, we will be learning how to compare equivalent decimals and fractions.	ACMNA126 ACMNA128
9	Converting between decimals and fractions	In this lesson, we will be learning how to convert a fraction to a decimal using	ACMNA126 ACMNA128

		different strategies.	
10	Fractions problem solving	In this lesson, we will be learning how to solve fraction problems relating to shape, including calculating the perimeter and finding missing lengths.	ACMNA126 ACMNA128

Unit 3 Missing Angles and lengths

5 Lessons

Lesson	Lesson learning intention	Students will learn	
1	Find the value of missing angles	In this lesson, we will be studying angles. We will use algebra and bar models to represent problems and calculate missing angles.	ACMMG141
2	Compare and classify triangles	In this lesson, we will compare and classify triangles, looking at how to recognise the different types of triangles and the sum of the angles in a triangle.	ACMMG141
3	Compare and classify quadrilaterals	In this lesson, we will classify different types of quadrilateral and learn about the sum of their internal angles.	ACMMG141
4	Find unknown angles in triangles	In this lesson, we will represent the angles in a triangle pictorially and	ACMMG141

		algebraically before learning how to calculate missing angles.	ACMMG165
5	Find the value of missing angles in quadrilaterals	In this lesson, we will represent the angles in a quadrilateral pictorially and algebraically before learning how to calculate missing angles.	ACMMG141 ACMMG165 ACMMG166