

## **Lesson Overview** Year 4 • Number and Fractions

Strand	Unit number	Unit Name	Lesson number	Lesson name	Australian Curriculum v9 codes	Lesson outcomes Students will be able to:
Number	4	Numbers to 100 000	1	Numbers to 100 000	AC9M4N05	Read and write multi-digit numbers in numerals, number names, and expanded form.
			2	Place Value	AC9M4N05	Recognise that a digit in one place represents ten times the value of the place to its right.
			3	Comparing Digits	AC9M4N05	Use place value understanding to compare digits in numbers.
			4	Comparing Numbers	AC9M4N05	Compare and order multi-digit numbers based on the digits in each place.
	5	Numbers and Decimals	1	Rounding Numbers	AC9M4N07	Use place value understanding to round multi-digit whole numbers to any place value.
			2	Decimal Places	AC9M4N01	Use division by 10 to extend the place-value system into decimal places.
			3	Compare Decimals	AC9M4N01	Compare two decimals to hundredths by reasoning about their size using place value.
			4	Money in Decimals	AC9M4N01	Represent amounts of money in decimal form with two decimal places and use the symbols \$ and c.
Fractions	2	Counting Fractions	1	Mixed Numerals	AC9M4N04	Identify mixed numerals and show how they are composed.
			2	Fraction Number Lines	AC9M4N04	Count, locate and represent fractions, including mixed numerals, on a number line.
			3	Compare Fractions: Draw a picture	AC9M4N03	Compare fractions with different numerators and denominators by drawing fraction shapes and arrays.
			4	Compare Fractions: Diagrams	AC9M4N03	Compare fractions with different numerators and denominators using a fraction wall or number line.
	3	Equivalent Fractions	1	Equivalent Fractions: Draw a diagram	AC9M4N03	Use shapes, fraction strips and number lines to find and represent equivalent fractions.
			2	Fraction Families	AC9M4N03	Investigate equivalent fractions by exploring families of fractions on a fraction wall.
			3	Convert Fractions: Count the Parts	AC9M4N04	Convert between mixed numbers and fractions using diagrams and decomposition.
	4	Decimal Fractions	1	Tenths and Hundredths	AC9M4N03	Express a fraction with a denominator of 10 as an equivalent fraction with a denominator of 100.
			2	Converting Fractions and Decimals	AC9M4N03	Write fractions with denominators 10 or 100 as decimals, and vice versa.
			3	Decimal Number Lines	AC9M4N04	Make connections between 10ths, 100ths and their equivalent decimals on the number line.
			4	Equivalent Fractions and Decimals	AC9M4N03	Find equivalent decimals for halves, quarters and fifths by converting them to 10ths and 100ths.

## Lesson Overview Year 4 - Operations



Strand	Unit number	Unit Name	Lesson number	Lesson name	Australian Curriculum v9 codes	Lesson outcomes Students will be able to:
	7	Addition and Subtraction Strategies 2	1	Addition Strategies	AC9M4N06	Use place value understanding to assist calculations.
			2	Subtraction Strategies	AC9M4N06	Use place value understanding and the inverse operation to assist calculations.
			3	Making Calculations Easier	AC9M4N07	Use rounding and an understanding of difference to assist calculations.
			4	Finding Unknown Quantities	AC9M4A01	Find unknown quantities in number sentences involving addition and subtraction.
	8	Addition and Subtraction Algorithms	1	Algorithms: Addition	AC9M4N06	Fluently add multi-digit whole numbers using the standard algorithm.
			2	Algorithms: Subtraction	AC9M4N06	Fluently subtract multi-digit whole numbers using the standard algorithm.
			3	Word Problems: Add & Subtract	AC9M4N08	Solve multi-step word problems involving addition and subtraction of whole numbers.
	9	Multiplication Thinking	1	The Times Tables	AC9M4A02	Recall multiplication facts up to $10 \times 10$ .
			2	Factors	AC9M5N02	Identify and describe factors of whole numbers from 1 to 100.
Operations			3	Multiples within 100	AC9M5N02	Investigate multiples within the times tables.
			4	Equivalent Multiplication Facts	AC9M4A02	Recall multiplication facts up to 10 $\times$ 10 to find equations with the same answer.
	10	Multiplication Strategies	1	Multiplication by 10, 100 and 1000	AC9M4N05	Multiply using strategies based on place value.
			2	Mental Maths: Multiplication 1	AC9M4N06	Multiply using strategies based on the commutative and associative properties of multiplication.
			3	Mental Maths: Multiplication 2	AC9M4N06	Multiply using a strategy based on the distributive property of multiplication.
	11	Division Strategies	1	Division Facts	AC9M4A02	Recall division facts related to the multiplication facts up to 10 $\times$ 10.
			2	Mental Maths: Division Strategies 1	AC9M4N06	Find quotients using the inverse relationship between multiplication and division.
			3	Mental Maths: Division Strategies 2	AC9M4N06	Find quotients using the distributive property of division.
	12	Operations with Odd and Even Numbers	1	Odds and Evens in Addition and Subtraction	AC9M4N02	Investigate the properties of odd and even numbers in addition and subtraction equations.
			2	Odds and Evens in Multiplication	AC9M4N02	Investigate the properties of odd and even numbers in multiplication equations.
			3	Doubling	AC9M4N06	Use doubling as a mental strategy for multiplication by 2, 4 and 8.
			4	Halving	AC9M4N06	Use halving as a mental strategy for division by 2, 4 and 8 where there is no remainder.
	13	Multiplication Patterns	1	Multiplication Number Sequences	AC9M4N09	Explore and describe number patterns resulting from performing multiplication.
			2	Multiplication Patterns in a 100 Square	AC9M4A02	Explore and describe patterns of multiples in a 100 square.
			3	The Multiplication Chart	AC9M4A02	Find answers and explore patterns in the multiplication chart.
	14	Word Problems	1	Word Problems: Multiplication	AC9M4N08	Solve multi-step word problems involving multiplication of whole numbers.
			2	Word Problems: Division	AC9M4N08	Solve multi-step word problems involving division of whole numbers.
			3	Word Problems: Money	AC9M4N08	Solve problems involving purchases and the calculation of change to the nearest five cents.

## Lesson Overview Year 4 • Geometry



