



Mathseeds Prime and the New Zealand Curriculum: Mathematics and statistics



YEAR 4			Prime Lessons	Printable Resources	Additional Resources
Know	Concepts	Outcome	Online Lessons with Assessments & Problem Solving Activities	Lesson Summary, Worksheets, Answers	Student book & Teacher book
Number	Number structure	identify, read, write, compare, and order whole numbers up to 100,000, and represent them using base 10 structure.	NUMBER Unit 4 Numbers to 100 000: Lesson 1, 2, 3, 4 Problem Solving Activity: More, more, more		Year 4 Numbers, Fractions and Decimals
		identify factors of numbers up to 100.	OPERATIONS Unit 9 Multiplication Thinking: Lesson 2		Year 4 Operations and Algebra
	Operations	use rounding, estimation, and inverse operations to predict results and to check the reasonableness of calculations. round whole numbers to the nearest ten thousand, thousand, hundreds or ten, and round tenths to the nearest whole number.	NUMBER Unit 5 Numbers and Decimals: Lesson 1		Year 4 Numbers, Fractions and Decimals
		add and subtract whole numbers up to 10,000.	OPERATIONS Unit 7 Addition and Subtraction Strategies 2: Lesson 1, 2, 3, 4 Problem Solving Activity: A Magic Square OPERATIONS Unit 8 Addition and Subtraction Algorithms: Lesson 1, 2, 3 Problem Solving Activity: Problem Algorithms OPERATIONS Unit 12 Operations with Odd and Even Numbers: Lesson 1 Problem Solving Activity: An Age Old Problem		Year 4 Operations and Algebra
		recall multiplication facts for 7s, 8s, and 9s and corresponding division facts.	OPERATIONS Unit 9 Multiplication Thinking: Lesson 1, 3, 4 OPERATIONS Unit 12 Operations with Odd and Even Numbers: Lesson 3		
		multiply a three-digit by one-digit number and two two-digit whole numbers.	OPERATIONS Unit 9 Multiplication Thinking: Lesson 1, 3, 4 Problem Solving Activity: How Many Cookies? OPERATIONS Unit 10 Multiplication Strategies: Lesson 1, 2, 3 Problem Solving Activity: Bug Racing OPERATIONS Unit 12 Operations with Odd and Even Numbers: Lesson 2, 3 Problem Solving Activity: An Age Old Problem OPERATIONS Unit 13 Multiplication Patterns: Lesson 1, 2, 3 Problem Solving Activity: Timing is Everything OPERATIONS Unit 14 Word Problems: Lesson 1 Problem Solving Activity: Wolf vs Rabbit		
		divide up to three-digit whole number by a one-digit divisor, with a remainder.	OPERATIONS Unit 11 Division Strategies: Lesson 1, 2, 3 Problem Solving Activity: Okapi Operations OPERATIONS Unit 12 Operations with Odd and Even Numbers: Lesson 4 OPERATIONS Unit 14 Word Problems: Lesson 2		
	Rational numbers	identify, read, write, and represent tenths and hundredths as fractions and decimals.	NUMBER Unit 5 Numbers and Decimals: Lesson 2 FRACTION Unit 4 Decimal Fractions: Lesson 1, 2, 3, 4 Problem Solving Activity: Fraction Robot		Year 4 Numbers, Fractions and Decimals
		compare and order tenths and hundredths as fractions and decimals, and convert decimal tenths and hundredths to fractions.	NUMBER Unit 5 Numbers and Decimals: Lesson 3 Problem Solving Activity: First and Last FRACTION Unit 4 Decimal Fractions: Lesson 1, 2, 3, 4		
		for fractions with denominators of 2, 3, 4, 5, 6, 8, 10, 12, or 100: compare and order the fractions, identify when two fractions are equivalent	FRACTION Unit 2 Counting Fractions: Lesson 1, 2, 3, 4 Problem Solving Activity: Woolly Thinking FRACTION Unit 3 Equivalent Fractions: Lesson 1, 2 Problem Solving Activity: Reward Cards		
		convert between mixed numbers and improper fractions with denominators of up to 10.	FRACTION Unit 3 Equivalent Fractions: Lesson 3 FRACTION Unit 4 Decimal Fractions: Lesson 1, 2, 3, 4		
	Financial mathematics	represent money values in multiple ways using notes and coins.	NUMBER Unit 5 Numbers and Decimals: Lesson 4 OPERATIONS Unit 14 Word Problems: Lesson 3		
		estimate to the nearest dollar and calculate the total cost of items costing dollars and cents, and the change from the nearest ten dollars.	NUMBER Unit 5 Numbers and Decimals: Lesson 4 OPERATIONS Unit 14 Word Problems: Lesson 3		
Algebra	Equations and relationships	form and solve true or false number sentences and open number sentences involving all four operations.	OPERATIONS Unit 7 Addition and Subtraction Strategies 2: Lesson 4 OPERATIONS Unit 9 Multiplication Thinking: Lesson 4		Year 4 Operations and Algebra
		use tables to recognise the relationship between the ordinal position and its corresponding element in a growing pattern, develop a rule for the pattern in words, and make conjectures about further elements or terms in the pattern.	OPERATIONS Unit 13 Multiplication Patterns: Lesson 1, 2, 3		
Measurement	Measuring	describe angles using the terms acute, right, obtuse, straight, and reflex, comparing them with benchmarks of 90, 180, and 360 degrees.	GEOMETRY Unit 6 Shape Movements: Lesson 1 GEOMETRY Unit 7 Angles: Lesson 1, 2, 3 Problem Solving Activity: Equation Angles		Year 4 Geometry
Geometry	Shapes	identify, classify, and describe the attributes of: regular and irregular polygons, using edges, vertices, and angles.	GEOMETRY Unit 5 Shapes and Objects: Lesson 1, 2 Problem Solving Activity: Tangram Puzzles GEOMETRY Unit 6 Shape Movements: Lesson 2, 3 Problem Solving Activity: Symmetrical Designs		
		identify, classify, and describe the attributes of prisms, using cross sections, faces, edges, and vertices.	GEOMETRY Unit 5 Shapes and Objects: Lesson 3, 4		
	Spatial reasoning	visualise 3D shapes and connect them with nets, 2D diagrams, verbal descriptions, and the same shapes drawn from different perspectives.	GEOMETRY Unit 5 Shapes and Objects: Lesson 4		
	Pathways	interpret and create grid maps to plot positions and pathways, using grid references and directional language, including the four main compass points.	GEOMETRY Unit 8 Maps: Lesson 1, 2, 3 Problem Solving Activity: Delivery Route		