

NUMBER AND ALGEBRA – YEAR 5

Number & Place Value	Real Numbers (Fractions and Decimals)	Money and Financial Mathematics	Patterns & Algebra	Linear & Non-linear Relationships (Years 7 & 8)
Identify and describe factors and multiples of whole numbers and use them to solve problems (098) N 5-1, 5-2, 5-3, 5-4, 5-5	Compare and order common unit fractions and locate and represent them on a number line (102) N 6-1, 6-2	Create simple financial plans (106) Supplementary activities	Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction (107) N 6-7, 8-3 A 1-1, 1-2 A 2-1, 2-1, 2-3, 2-4, 2-5	
Use estimation and rounding to check the reasonableness of answers to calculations (099) N 7-1	Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator (103) N 8-2		Use equivalent number sentences involving multiplication and division to find unknown quantities (121) N 7-5, 7-6 A 13-1	
Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies (100) N 1-7	Recognise that the number system can be extended beyond hundredths (104) N 2-1			
Solve problems involving division by a one digit number, including those that result in a remainder (101) N 1-8	Compare, order and represent decimals (105) N 2-1, 2-2, 2-3, 2-4, 2-5			
Use efficient mental and written strategies and apply appropriate digital technologies to solve problems (291) N 7-2, 7-3, 7-4, 7-5, 7-6, 7-7				

NUMBER AND ALGEBRA – YEAR 6

Number & Place Value	Real Numbers (Fractions and Decimals)	Money and Financial Mathematics	Patterns & Algebra	Linear & Non-linear Relationships (Years 7 & 8)
<p>Identify and describe properties of prime, composite, square and triangular numbers (122) N 4-1, 5-6, 5-7, 5-8, 13-6</p>	<p>Compare fractions with related denominators and locate and represent them on a number line (125) N 8-2, 8-3</p>	<p>Investigate and calculate percentage discounts of 10%, 25% and 50% on sale items, with and without digital technologies (132) N 9-10 Supplementary activities</p>	<p>Continue and create sequences involving whole numbers, fractions and decimals. Describe the rule used to create the sequence (133) N 6-7, 8-3 N Chapter 13 A 1-3, 1-4, 1-6 A 2-1, 2-2, 2-3, 2-4, 2-5</p>	
<p>Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers (123) N 7-2, 7-3, 7-4, 7-5, 7-6</p>	<p>Solve problems involving addition and subtraction of fractions with the same or related denominators (126) N 8-2, 8-3, 8-10</p>		<p>Explore the use of brackets and order of operations to write number sentences (134) N 4-7, 4-8</p>	
<p>Investigate everyday situations that use positive and negative whole numbers and zero. Locate and represent these numbers on a number line (124) N 3-1, 3-2, 3-3</p>	<p>Find a simple fraction of a quantity where the result is a whole number, with and without digital technologies (127) N 6-6</p>			
	<p>Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers (128) N 2-9</p>			

	Multiply decimals by whole numbers and perform divisions that result in terminating decimals, with and without digital technologies (129) N 2-10, 2-11			
	Multiply and divide decimals by powers of 10 (130) N 2-1			
	Make connections between equivalent fractions, decimals and percentages (131) N 2-7 N 6-4 N 7-8 N 9-1, 9-2, 9-3			

NUMBER AND ALGEBRA – YEAR 7

Number & Place Value	Real Numbers (Fractions and Decimals)	Money and Financial Mathematics	Patterns & Algebra	Linear & Non-linear Relationships (Years 7 & 8)
Investigate index notation and represent whole numbers as products of powers of prime numbers (149) N 4-2, 4-3, 4-4 N 5-6, 5-7, 5-8, 5-9	Compare fractions using equivalence. Locate and represent fractions and mixed numerals on a number line (152) N 6-3, 6-4, 6-7, 6-8, 6-9, N 8-3, 8-4	Investigate and calculate 'best buys', with and without digital technologies (174) N 10-1	Introduce the concept of variables as a way of representing numbers using letters (175) A Chapter 2	Given coordinates, plot points on the Cartesian plane, and find coordinates for a given point (178) A Chapter 4
Investigate and use square roots of perfect square numbers (150) N 4-1, 4-6	Solve problems involving addition and subtraction of fractions, including those with unrelated denominators (153) N 8-1, 8-2, 8-3, 8-4		Create algebraic expressions and evaluate them by substituting a given value for each variable (176) A Chapter 2 A Chapter 3	Solve simple linear equations (179) A Chapter 5 A Chapter 7 A 8-1, 8-2, 8-3, 8-4, 8-5, 8-6
Apply the associative, commutative and distributive laws to aid mental and written computation (151) N 7-2, 7-3, 7-4, 7-5, 7-6, 7-7, 7-9 A 9-1 A 10-1 A 11-1, 11-5 A 12-2	Multiply and divide fractions and decimals using efficient written strategies and digital technologies (154) N 2-10, 2-11, N 8-5, 8-6, 8-7, 8-8, 8-9		Extend and apply the laws and properties of arithmetic to algebraic terms and expressions (177) A 7-6 A Chapter 9 A Chapter 10 A Chapter 11 A Chapter 12	Investigate, interpret and analyse graphs from authentic data (180) A Chapter 6 D 4-7, 4-8, 4-9 D Chapter 5 D Chapter 13 D Chapter 14 M 6-8
Compare, order, and subtract integers (280) N 3-4, 3-5	Express one quantity as a fraction of another, with and without the use of digital technologies (155) N 6-6, N 8-6, 8-10			
	Round decimals to a specified number of decimal places (156) N 2-5, 2-6			

	<p>Connect fractions, decimals and percentages and carry out simple conversions (157)</p> <p>N 6-4 N 7-8 N 9-3</p>			
	<p>Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies (158)</p> <p>N 9-2, 9-3, 9-4, 9-5, 9-6, 9-7, 9-8, 9-9, 9-10, 9-11, 9-12, 9-13</p>			
	<p>Recognise and solve problems involving simple ratios (173)</p> <p>N 11-1, 11-2, 11-3, 11-4, 11-5, 11-6, 11-7, 11-8, 11-9, 11-10</p>			

NUMBER AND ALGEBRA – YEAR 8

Number & Place Value	Real Numbers (Fractions and Decimals)	Money and Financial Mathematics	Patterns & Algebra	Linear & Non-linear Relationships (Years 7 & 8)
Use index notation with numbers to establish the index laws with positive integral indices and the zero index (182) N 4-2, 4-3, 4-4, 4-5, 4-9	Investigate terminating and recurring decimals (184) N 2-8	Solve problems involving profit and loss, with and without digital technologies (189) N 9-10, 9-11 Supplementary activities	Solve problems involving profit and loss, with and without digital technologies (190) A 11-1, 11-4	Plot linear relationships on the Cartesian plane with and without the use of digital technologies (193) A 4-6 A Chapter 5 N 10-4, 10-5, 10-8 D Chapter 13
Carry out the four operations with integers, using efficient mental and written strategies and appropriate digital technologies (183) N 3-6, 3-7, 3-8	Investigate the concept of irrational numbers, including π (186) M 9-7 M 11-5		Factorise algebraic expressions by identifying numerical factors (191) A 11-1, 11-2, 11-3, 11-4	Solve linear equations using algebraic and graphical techniques. Verify solutions by substitution (194) A Chapter 5 A Chapter 7 A 8-1, 8-2, 8-3, 8-4, 8-5, 8-6
	Solve problems involving the use of percentages, including percentage increases and decreases, with and without digital technologies (187) N Chapter 9		Simplify algebraic expressions involving the four operations (192) A Chapter 11 A Chapter 12	
	Solve a range of problems involving rates and ratios, with and without digital technologies (188) N Chapter 10 N Chapter 11			