Planning Guide
Advanced Counting to Early Additive

Addition and Subtraction

Strategy	Numeracy Book Reference	Unit in this book	pages
Solve addition and subtraction problems.	*Teaching Addition and Subtraction (Book 5)* Number Tiles The Number Strip The Bears' Picnic Frog Jumps The Bigger Number First Change Unknown Counting Back Adding Tens Subtracting Tens	**1-Adding and subtracting review** *We are learning to solve addition and subtraction problems.* ***Note** This unit revises all of the addition and subtraction strategies covered in units 1 to 10 from the New Zealand Curriculum Mathematics Stage 4 Advanced Counting book.*	**16 to 19**
Identify all of the numbers in the range 0 – 1000. (Number Identification)	*No specific Numeracy Book reference*	**2-Understanding place value** *We are learning to understand place value.*	**20 to 27**
Solve addition and subtraction problems with groups of ten, using place value materials, e.g. 30 + 20 = 50, 63 – 30 = 33, 64 – 32 = 32	*Teaching Addition and Subtraction (Book 5)* Adding Ones and Tens	**3-Adding ones and tens** *We are learning to add two-digit numbers where the sum of the ones digits is less than 10.*	**28 to 33**
		4-Subtracting ones and tens *We are learning to subtract two-digit numbers.*	**34 to 41**
	Subtracting Ones and Tens		
		5-What's missing? *We are learning to solve problems like 45 + ☐ = 67, which do not involve renaming.*	**42 to 47**
	The Missing Ones and Tens		
		6-Left, right, up and down *We are learning to add and subtract ones and tens by moving left, right, up and down on charts with numbers up to 1000.*	**48 to 55**
	The Thousands Book		

Strategy	Numeracy Book Reference	Unit in this book	pages
Solve addition and subtraction problems by working from doubles.	*No specific Numeracy Book reference*	**7-Near doubles** *We are learning to solve addition and subtraction problems using near doubles.*	**56 to 59**
Solve addition problems by looking for compatible numbers that add to ten, other decades or one hundred.	***Teaching Addition and Subtraction (Book 5)*** Make Ten	**8-Adding to make ten** *We are learning to add three or more numbers by first making pairs that add up to 10.*	**60 to 63**
Solve addition and subtraction problems.	***Teaching Addition and Subtraction (Book 5)*** Adding Ones and Tens Subtracting Ones and Tens The Missing Ones and Tens The Thousands Book Make Ten	**9-Adding and subtracting practice 1** *We are learning to solve addition and subtraction problems.* ***Note** This unit revises all of the addition and subtraction strategies covered in units 3 to 8.*	**64 to 71**
Solve subtraction problems by going back through tens.	***Teaching Addition and Subtraction (Book 5)*** Subtraction in Parts	**10-Subtracting in parts** *We are learning to subtract by splitting numbers into parts instead of counting down.*	**72 to 77**
Solve addition problems by going up through tens.	***Teaching Addition and Subtraction (Book 5)*** Adding in Parts	**11-Adding in parts** *We are learning to add by splitting numbers into parts.*	**78 to 83**
Solve addition problems by going up through tens.	***Teaching Addition and Subtraction (Book 5)*** Up over the Tens	**12-Adding by going up through ten** *We are learning to add by splitting numbers into parts to make tens.*	**84 to 87**
Solve addition problems by combining tens and ones.	***Teaching Addition and Subtraction (Book 5)*** Adding Tens Adding Ones and Tens Missing Ones and Tens The Thousands Book	**13-Adding by splitting tens and ones** *We are learning to add by adding the ones and tens separately.*	**88 to 91**

Strategy	Numeracy Book Reference	Unit in this book	pages
Solve addition problems by making a tidy number.	*No specific Numeracy Book reference*	**14-Adding using tidy numbers** *We are learning to add using tidy numbers.*	**92 to 97**
Solve addition and subtraction problems.	*Teaching Addition and Subtraction (Book 5)* Adding Ones and Tens Subtracting Ones and Tens The Missing Ones and Tens The Thousands Book Make Ten Subtraction in Parts Adding in Parts Up over the Tens	**15-Adding and subtracting practice 2** *We are learning to solve addition and subtraction problems.* ***Note This unit revises all of the addition and subtraction strategies covered in units 3 to 14.***	**98 to 105**

Multiplication and Division

Strategy	Numeracy Book Reference	Unit in this book	Pages
Solve multiplication problems using repeated addition. Solve multiplication problems using skip counting in 2s, 5s and 10s.	*Teaching Multiplication and Division (Book 6)* Introduction Numbers Strips Twos, Fives and Tens	**16-Understanding mutliplication** *We are learning that skip counting and repeated addtion are the same as multiplying.*	**106 to 115**
Solve division problems by equal sharing in ones, twos and fives	*Teaching Multiplication and Division (Book 6)* Twos, Fives and Tens Pirate Crews	**17-Understanding division** *We are learning to solve division problems by equal sharing in ones, twos and fives.*	**116 to 125**
Solve multiplication problems by doubling.	*Teaching Multiplication and Division (Book 6)* Twos, Fives and Tens	**18-Tens, fives and twos** *We are learning to use doubling to solve some multiplication problems.*	**126 to 131**
Solve multiplication problems using ways other than repeated addition. Use the commutative property.	*Teaching Multiplication and Division (Book 6)* Animal Arrays	**19-More multiplying** *We are learning to multiply using ways other than skip counting.*	**132 to 139**

Strategy	Numeracy Book Reference	Unit in this book	Pages
Solve problems using two, five and ten times tables (and learn them).	*Teaching Multiplication and Division (Book 6)* Number Strips Animal Arrays Twos, Fives and Tens Pirate Crews	**20-Multiplying and dividing practice** *We are learning our two, five and ten times facts.* ***Note This unit revises all of the multiplication strategies covered in units 16 to 19.***	**140 to 149**

Ratios and Proportions

Strategy	Numeracy Book Reference	Unit in this book	Pages
Find simple fractions of shapes and lengths starting with halves and quarters, then moving to thirds, fifths and tenths.	*Teaching Fractions, Decimals and Percentages (Book 7)* Fair Shares	**21-Fractions of shapes and lengths** *We are learning to find halves, quarters and other fractions of shapes.*	**150 to 159**
Find a fraction of a number by sharing out the objects equally, moving towards anticipating the sharing by imaging or skip counting. Emphasis on halves, quarters, eighths, thirds and fifths. Find a unit fraction of a set using addition facts, doubles, e.g. ¼ of 16 using ½ of 16 is 8.	*Teaching Fractions, Decimals and Percentages (Book 7)* Fair Shares Animals Hungry Birds	**22-Fractions of sets** *We are learning to use basic facts to work out fractions of a set.*	**160 to 169**
Order fractions visually using materials.	*Teaching Fractions, Decimals and Percentages (Book 7)* Fraction Circles	**23-Ordering fractions** *We are learning to order unit fractions.*	**170 to 175**

Algebraic Thinking

Strategy	Numeracy Book Reference	Unit in this book	Pages
Continue a picture pattern and work out the rule for finding the next picture in the sequence.	*Teaching Number through Measurement, Geometry, Algebra and Statistics (Book 9)* Thinking Ahead Sticky Moments	**24-Picture patterns** *We are learning how to carry on picture patterns and use number strategies to think ahead.*	**176 to 183**
Continue a number pattern and work out the rule for finding the next number in the sequence.	*No specific Numeracy Book reference*	**25-Number patterns** *We are learning how to continue a number pattern.*	**184 to 187**
Understand what the equals symbol means and solve simple equations.	*Teaching Number through Measurement, Geometry, Algebra and Statistics (Book 9)* Numbers at Work	**26-Equal or not?** *We are learning what equals means and how to solve simple equations.*	**188 to 197**

Number Knowledge

Knowledge being developed	Resources	Number Knowledge unit in this book	pages
Identify all of the numbers in the range 0 to 1000. (Number Identification)	*Teaching Number Knowledge (Book 4)* 'Teen' and 'Ty' Numbers Number Fans Place Value Houses Number Hangman	*Number Knowledge unit A* *Reading and writing whole numbers up to 1000*	**198 and 199**
Know the number of tens in decades. Know the groupings of ten that can be made from a three-digit number. (Grouping/Place Value)	*Teaching Number Knowledge (Book 4)* Slavonic Abacus Tens and Ones	*Number Knowledge unit B* *How many tens and ones?*	**200 to 203**
Recall groupings of two that are in numbers up to 20. (Grouping/Place Value)	*Teaching Number Knowledge (Book 4)* Counting Skip-counting on the Number Line Beep	*Number Knowledge unit C* *Groups of two*	**204 and 205**

Strategy	Numeracy Book Reference	Unit in this book	Pages
Recall groupings of five that are in numbers up to 50. (Grouping/Place Value)	*Teaching Number Knowledge (Book 4)* Counting Beep Fabulous Fives	*Number Knowledge unit D* *Groups of five*	**206 and 207**
Order whole numbers in the range 0 to 1000. (Number Sequence and Order)	*Teaching Number Knowledge (Book 4)* Counting Card Ordering Arrow Cards Rocket – Where Will It Fit? Number Line Flips	*Number Knowledge unit E* *Ordering numbers up to 1000*	**208 to 213**
Say the number 1 before and after a given number in the range 0 – 1000. (Number Sequence and Order)	*Teaching Number Knowledge (Book 4)* Counting Lucky Dip Hundreds Boards and Thousands Book	*Number Knowledge unit F* *What comes 1 before or after?*	**214 and 215**
Say the number 10 or 100 before and after a given number in the range 0 – 1000. (Number Sequence and Order)	*Teaching Number Knowledge (Book 4)* Counting Lucky Dip Hundreds Boards and Thousands Book	*Number Knowledge unit G* *What comes 10 or 100 before or after?*	**216 and 217**
Say the forwards and backwards skip counting sequences in the range 0 to 100 for twos, fours, fives and tens. (Number Sequence and Order)	*Teaching Number Knowledge (Book 4)* Skip-counting on the Number Line	*Number Knowledge unit H* *Skip counting in twos, fours, fives and tens*	**218 to 225**
Recall the addition facts to ten. Recall the groupings within 20, e.g. 12 and 8, 6 and 14. (Basic Facts)	*Teaching Number Knowledge (Book 4)* Up to Ten Tens Frames Again Patterns to 10 Bridges	*Number Knowledge unit I* *Addition and subtraction to and from a tidy number*	**226 to 229**

Strategy	Numeracy Book Reference	Unit in this book	Pages
Recall the doubles to 20 and corresponding halves, e.g. 7 + 7 = 14, ½ of 14 = 7. (Basic Facts)	*Teaching Number Knowledge (Book 4)* Double Trouble	*Number Knowledge unit J* *Doubles and halves*	**230 and 231**
Recall the addition and subtraction facts to twenty. (Grouping/Place Value and Basic Facts)	*Teaching Number Knowledge (Book 4)* Bridges Addition Flash Cards	*Number Knowledge unit K* *Adding to 20*	**232 to 237**
Recall the decades that add to 100, e.g. 60 + 40 = 100 (Grouping/Place Value)	*Teaching Number Knowledge (Book 4)* Patterns to 10 Addition Flash Cards	*Number Knowledge unit L* *Making hundreds with tens numbers*	**238 and 239**
Recall multiples of five groupings within a 100, e.g 45 + 55 = 100 (Grouping/Place Value)	*Teaching Number Knowledge (Book 4)* Tens Frames Again Patterns to 10 Bridges	*Number Knowledge unit M* *Making 100 with fives numbers*	**240 and 241**
Recall the multiplication and division facts for 2, 5 and 10. (Basic Facts)	*Teaching Number Knowledge (Book 4)* Skip-counting on the Number Line Double Trouble Bowl a Fact Multiplication Madness	*Number Knowledge unit N* *Two, five and ten times tables*	**242 to 251**
Know how to make a family of facts given one addition, subtraction, multiplication or division fact.	*Teaching Number Knowledge (Book 4)* Number Boggle Number Mats and Number Fans Multiplication Madness	*Number Knowledge unit O* *Family of facts*	**252 and 253**
Develop common vocabulary for fractions, particularly halves, quarters, thirds, fifths. Identify the symbols for halves, quarters, thirds, fifths and tenths. (Number Identification)	*Teaching Number Knowledge (Book 4)* Fraction Pieces	*Number Knowledge unit P* *Naming fractions*	**254 to 258**