Stages 6-7 Addition and Student Planner

Stage	IALT	Personalised Activity	Computer Mathletics	Maintenance Group Box
6	**1. Solve + and – problems using rounding and compensation (tidy numbers).**	**NZCM** Adding using tidy numbers with problems like 37+? =52 pages 30- 31 and *pages 32-33.* Adding using tidy numbers with problems like 15+27=? Pages 34-37 Subtracting using tidy numbers pages 38-40 and *pages 41-43* Adding and subtracting using tidy numbers close to 100 pages 44 and 45. **NNN Stage 6- Part A:** Using tidy numbers to solve problems p.38 **NNN Stage 6-Part B:** Adjusting to the nearest 100 to solve problems p.21 Making tidy numbers p.23 **FIO-** (Tidy Numbers) N3.2 Tracking Toroa p.1 NS&AT3.1 Tidying Up p.2 **ANP Addition:** Adjusting to make 10 p.23 Adjusting to make 100 p.24 Compensation strategy-rounding up p.25 Compensation strategy- rounding down p.26 Grouping numbers to make 100 p.24 Estimating answers p.34 (could work chn into rounding and compensating) **ANP Subtraction:** When one number is near a hundred p.22 When one number is over a hundred p.23 Tidy numbers (1) p.24 Tidy numbers (2) p.25 Tidy problems p.26 Applying Mental Strategies p.29 Age on a number line p.30		The Card Game
	2. Solve + and – problems using equal	**NZCM** Subtracting using tidy numbers pages 38-40 and *pages 41-43* Adding and subtracting using tidy numbers close to 100 pages 44 and		The Card Game

	additions.	45. **NNN Stage 6-Part B:** Adjusting to the nearest 100 to solve problems p.21 Making tidy numbers p.23 **ANP Subtraction:** When one number is near a hundred p.22 When one number is over a hundred p.23 Equal Additions p.27 Equal subtractions p.28 Applying Mental Strategies p.29 Age on a number line p.30		
	3. Solve + and – problems using place value.	**NZCM-** -Subtracting using place value pages 46, 47 and 49. -Parking Numbers p.48 -Adding and subtracting tens and ones separately pages 68-69. *NZCM-Adding and Subtracting where large numbers roll over pages 74-75. **NNN Stage 6- Part A:** Identifying place value p.17 Using place value to solve problems p.37 **NNN Stage 6-Part B:** Mentally adding the ones and tens separately p.16 Rolling over and rolling back p.40 **ANP Subtraction:** Partitioning p.34 **FIO** N2.1 Hip Hip Hop p.8 N2.1 Weka Wobble p.11 N3.3 Slippery Slope p.8 N3-4.1 Money Everywhere p.1 NS&AT3.1 Megabytes of Memory p.4 N7/8 L.1 Firewood Fever p.16 N7/8 L.1 Space Zapper p.8 N7/8 L.1 Fundraiser p.6 **ANP Addition:** -Adding hundreds then tens then ones p.28 and 29 -3 digit addition with no trading p.35 -3 digit addition with trading to the tens p.36 -3 digit addition with trading to the hundreds p.37 -3 digit addition with trading to the tens and hundreds p.38 -4 digit addition with trading to the hundreds and thousands p.40	<u>Year 5 Time and Place</u> Place Value to Thousands <u>Year 5 Time and Place (something easier)</u> Making Big Numbers Count Place Value to Millions <u>Year 6 Rounding and Place Value (something harder)</u> Expanding Numbers Place Value to Millions Rounding Numbers <u>Year 7 Number Rules (something easier)</u> Place Value to Thousands <u>Year 7 Number Rules (middle)</u> Place Value to Millions <u>Year 6 Operations with Number (something easier)</u> Column Addition Column Subtraction Remainders by Tables Columns that subtract	Thousands Book Game- Secret Number Target Number Fans AA Tens Frames Arrow Cards

		-4 digit mixed trading p.41		
	4. Solve + and – problems using reversing.	**NZCM-** -Subtracting by adding instead pages 50-51 -Subtracting bigger numbers by adding instead pages 52-53. -Adding by subtracting instead pages 54-55. ***NZCM-** Subtracting by doing a different subtraction pages 56-57. *Subtraction with bigger numbers by doing a different subtraction pages 58-59. **FIO** BF3 Array Puzzles p.8 **ANP Addition:** Adding to subtract p.21 Reversing the question p.22 **NNN Stage 6-Part B:** Reversing problems and using mental methods p.20		
	5. Solve + and – problems using compatible numbers.	**NZCM-** Adding and subtracting by looking for compatible numbers pages 70-73. **FIO** *(Compatible Numbers)* N2.1 Different Strokes p.2 N2.1 Birthday Time p.10 N2.2 Hitting 100 p.4 N3.3 Crazy Compatibles p.1 N3.3 Skimming Stones p.4 NS&AT2-3.1 Wrapping Up Wontons p.1 NS&AT2-3.1 50 First p.4 NS&AT2-3.2 Tidying Up p.16 **ANP Addition:** Balancing Number sentences p.30 **NNN Stage 6-Part B:** Making balanced equations p.27 Using easy combinations in calculations p.33 **ANP Subtraction:** Three or more at a time (1) p.31 Three or more at a time (2) p.32		The Card Game
	6. Solve addition problems using standard written form.	**NZCM** Adding using a standard written form pages 82-85. (Also see ANP Addition pages for tens and hundreds and place value)	Year 5 Number and Patterns (something easier) Magic Mental Addition Columns that add	Create and solve algorithms. Check your answers on the calculator.

	7. Solve subtraction problems using standard written form.	**NZCM-** Subtracting using a standard written form pages 86-89 **ANP Subtraction:** The written algorithm for subtraction p.35 3 digit subtraction with trading p.36 3 digit subtraction with trading in the tens p.37 Subtraction with trading in the hundreds p.38 Trading in every column p. 39 Subtraction and addition skills p.45	<u>Year 5 Number and Patterns (something easier)</u> Columns that subtract <u>Year 5 Number and Patterns (middle)</u> Column Addition Column Subtraction Problems: Add and Subtract	Create and solve algorithms. Check your answers on the calculator. (Was this the fastest and most efficient strategy? If not which would have been faster?)
	E1. Use more than one strategy when solving + and – problems.	**NZCM-** Mental or Written for addition and subtraction? Pages 90-91 **ANP Addition:** Choosing an appropriate strategy p.33 **ANP Subtraction:** Choose your own strategy p.33 Mental Strategies (1) p.40 Mental Strategies (2) p.41 Mental or Written? p.42 Problem Solving p.46 **NNN Stage 6-Part B:** Applying mental subtraction methods p.25 Using more than one strategy to solve problems p.42	<u>Year 5 Number and Patterns (something harder)</u> Adding colossal columns Subtracting colossal columns Word problems Mass word Problems	Practice naming and using as many maths strategies as you can. (What strategies do you know? Which strategies do you need to learn or practice more?)
	E2. Choose the most efficient strategy when solving + and – problems.	**NZCM-** Adding and Subtracting by choosing an efficient strategy pages 92-95 and 97-99 ***NZCM-** Years and years page 96 **ANP Addition:** Choosing an appropriate strategy p.33 **ANP Subtraction:** Choose your own strategy p.33 Mental Strategies (1) p.40 Mental Strategies (2) p.41 Mental or Written? p.42 Problem Solving p.46 **NNN Stage 6-Part B:** Applying mental subtraction methods p.25 Using more than one strategy to solve problems p.42	<u>Year 5 Number and Patterns (something harder)</u> Adding colossal columns Subtracting colossal columns Word problems Mass word Problems	Practice naming and using as many maths strategies as you can. (What strategies do you know? Which strategies do you need to learn or practice more?)

| 7 | 1. Solve + and – problems using rounding and compensation from tidy numbers. | **NZCM-**
Adding using tidy numbers with problems like 37+? =52 pages 30- 31 and *pages 32-33.*

Adding using tidy numbers with problems like 15+27=? Pages 34-37

Subtracting using tidy numbers pages 38-40 and *pages 41-43*

Adding and subtracting using tidy numbers close to 100 pages 44 and 45.

NNN Stage 6- Part A:
Using tidy numbers to solve problems p.38

NNN Stage 6-Part B:
Adjusting to the nearest 100 to solve problems p.21
Making tidy numbers p.23

FIO-
(Tidy Numbers)
N3.2 Tracking Toroa p.1
NS&AT3.1 Tidying Up p.2

ANP Addition:
Adjusting to make 10 p.23
Adjusting to make 100 p.24
Compensation strategy-rounding up p.25
Compensation strategy- rounding down p.26
Grouping numbers to make 100 p.24

Estimating answers p.34 (could work chn into rounding and compensating)

ANP Subtraction:
When one number is near a hundred p.22
When one number is over a hundred p.23
Tidy numbers (1) p.24
Tidy numbers (2) p.25
Tidy problems p.26
Applying Mental Strategies p.29
Age on a number line p.30 | | The Card Game |
| | 2. Solve + and – problems using place value partitioning. | **NZCM-**
-Subtracting using place value pages 46, 47 and 49.
-Parking Numbers p.48
-Adding and subtracting tens and ones separately pages 68-69.

*NZCM-
Adding and Subtracting where large numbers roll over pages 74-75.

NNN Stage 6- Part A: | Year 5 Time and Place
Place Value to Thousands

Year 5 Time and Place (something easier)
Making Big Numbers Count
Place Value to Millions

Year 6 Rounding and Place Value (something harder) | Thousands Book Game- Secret Number

Target

Number Fans AA

Tens Frames

Arrow Cards |

| | | Identifying place value p.17
Using place value to solve problems p.37

NNN Stage 6-Part B:
Mentally adding the ones and tens separately p.16
Rolling over and rolling back p.40

ANP Addition:
Adding decimals using place value p.43

ANP Subtraction:
Partitioning p.34

FIO
N2.1 Hip Hip Hop p.8
N2.1 Weka Wobble p.11
N3.3 Slippery Slope p.8
N3-4.1 Money Everywhere p.1
NS&AT3.1 Megabytes of Memory p.4
N7/8 L.1 Firewood Fever p.16
N7/8 L.1 Space Zapper p.8
N7/8 L.1 Fundraiser p.6

ANP Addition:
-Adding hundreds then tens then ones p.28 and 29
-3 digit addition with no trading p.35
-3 digit addition with trading to the tens p.36
-3 digit addition with trading to the hundreds p.37
-3 digit addition with trading to the tens and hundreds p.38
-4 digit addition with trading to the hundreds and thousands p.40
-4 digit mixed trading p.41 | Expanding Numbers
Place Value to Millions
Rounding Numbers

Year 7 Number Rules (something easier)
Place Value to Thousands

Year 7 Number Rules (middle)
Place Value to Millions
Year 6 Operations with Number (something easier)
Column Addition
Column Subtraction
Remainders by Tables
Columns that subtract | |
| | **3. Solve + and – problems using reversibility.** | **NZCM-**
-Subtracting by adding instead pages 50-51
-Subtracting bigger numbers by adding instead pages 52-53.
-Adding by subtracting instead pages 54-55.

*NZCM-
Subtracting by doing a different subtraction pages 56-57.
Subtraction with bigger numbers by doing a different subtraction pages 58-59.

FIO
BF3 Array Puzzles p.8

ANP Addition:
Adding to subtract p.21
Reversing the question p.22
Reversibility and tidy numbers with decimals p.44 | | |

		NNN Stage 6-Part B: Reversing problems and using mental methods p.20		
	4. Solve + and – problems using equal additions.	**NZCM-** Subtracting using tidy numbers pages 38-40 and *pages 41-43* Adding and subtracting using tidy numbers close to 100 pages 44 and 45. **NNN Stage 6-Part B:** Adjusting to the nearest 100 to solve problems p.21 Making tidy numbers p.23 **ANP Subtraction:** When one number is near a hundred p.22 When one number is over a hundred p.23 Equal Additions p.27 Equal subtractions p.28 Applying Mental Strategies p.29 Age on a number line p.30		
	5. Solve + and – problems using standard written forms.	**NZCM-** -Adding using a standard written form pages 82-85. -Subtracting using a standard written form pages 86-89 **NNN Stages 7 & 8 Part B:** Using written forms with x problems p.29 **ANP Subtraction:** The written algorithm for subtraction p.35 3 digit subtraction with trading p.36 3 digit subtraction with trading in the tens p.37 Subtraction with trading in the hundreds p.38 Trading in every column p. 39 Subtraction and addition skills p.45	Year 7 Operations with Number (something easier) Magic Mental Addition Magic Mental Subtraction Column Addition Column Subtraction	
	6. Solve + and – problems using negatives (integers).	**NZCM S7 AM Bk 1-** Adding and Subtracting Integers pages 28-29 Pages 30-33 and 34-38 Page 39 **Number Smart Bk 1 Years 6-8** Positive and negative numbers p.8-9 **FIO** N3-4.1 Walking the Plank p.23 N3-4.3 The Volcanoes Erupt p.20 N3-4.3 Chilly Heights p.22 N7/8 4.4 It's a Try p.8 N7/8 4.4 Lifting Weights p.9		

		N7/8 4.4 Integer Zap p.10 N7/8 4.4 Shifty Subtraction p.15 N7/8 4.6 Judo Competition p.14		
	7. Solve + and – problems using simple equivalent fractions.	**NNN Stages 7 & 8 Part A:** Learning Equivalent Fractions p.24-26 **NNN Stages 7 & 8 Part B:** Converting a fraction to equivalent fractions p.32-33 **NZCM S7 AM Bk2-** Equivalent Fractions pages 30-35. Adding and Subtracting Fractions pages 36-37. **FIO** N3.3 Stacking Up p.20 N7/8 4.5 Egyptian Fractions PR 3-4.1 Galloping Greyhounds p.1	Year 6 Algebra and Fractions (something easier) Fractions of a collection Shading equivalent fractions Year 6 Algebra and Fractions (middle) Simplifying Fractions Equivalent Fractions Year 7 Operations with Number (something easier) Shading equivalent fractions	Fraction Cards Practice simplifying fractions. (How fast can you simplify?) Choose a fraction. Then list as many equivalent fractions for it as you can. Who can get the most?
	E1. Use more than one strategy when solving + and – problems.	**NZCM-** Mental or Written for addition and subtraction? Pages 90-91 **FIO** BF3 Paths and Pairs p.9 BF3 Calculator Golf p.18 N3.2 Stepping Out p.2 N3.3 Strategy Strut p.6 N3.3 Worth the Work p.10 N3-4.1 Head Cases p.13 N3-4.1 Kapa Haka p.14 NS&AT3.2 Maths Detective p.2 **Number Property Sheets+/-** Multiple Ways to Add and Subtract		Squeezie Box Arrow Cards Multiplication Grid Game Card Games Salute
	E2. Choose the most efficient strategy when solving + and – problems.	**NZCM S7 AM Bk1-** Addition and Subtraction Revision pages 18-21. **NNN Stages 7 & 8 Part B:** Choosing the best problem solving strategy p.30-31 **FIO** BF3 Paths and Pairs p.9 BF3 Calculator Golf p.18 N3.2 Stepping Out p.2 N3.3 Strategy Strut p.6 N3.3 Worth the Work p.10 N3-4.1 Head Cases p.13 N3-4.1 Kapa Haka p.14 NS&AT3.2 Maths Detective p.2		