Stage 7-8 Addition and Subtraction Student Planner

Stage	IALT	Personalised Activity	Computer Mathletics	Maintenance Group Box
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		The Card Game

		Age on a number line p.30		
	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:** 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	<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		
	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:**	Year 7 Operations with Number (something easier) Magic Mental Addition Magic Mental Subtraction Column Addition Column Subtraction	

		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		
	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	**NZCM-** Mental or Written for addition and subtraction? Pages 90-91		Squeezie Box Arrow Cards

	strategy when solving + and – problems.	**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		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		
8	**1. Solve + and – problems with fractions by converting to common denominators.**	See Problem Progressions AM-AP Page 2 Ratios and Proportions-for practice questions. FIO NS&AT3-4.1 Stripping Fractions p.8 Teacher Tools 2005 Fractions, Decimals and Percentages: Folding Fractions and Decimals p.38-39	Year 7 Fraction Rules (middle) Add: No Common Denominator Subtract: No Common Denominator Fraction by Whole Number Test	Create 3- Material Master game 7-9 Card Games Salute
	2. Solve + and – problems with whole numbers.	NZCM S7 Bk 1- Multiplying larger numbers pages 102-105.	Year 7 Decimal Power (something easier) Dividing by 10, 100, 1000 Comparing Decimals Multiplying by 10, 100, 1000 Nearest Whole Number Year 7 Decimal Power (middle) Are you ready? Adding Decimals Subtracting Decimals Multiply Decimals: 10, 100, 1000	Decimal Number Line. Decimal Place Value Houses

			Divide Decimals: 10,100,1000 Decimal by Whole Number Test	