Stages 6-7 Multiplication and Division Student Planner

Stage	IALT	Personalised Activity	Computer Mathletics	Maintenance Group Box
6	1. Solve x and ÷ problems using doubles and halving.	**NZCM-** Using times two facts pages 118-121. Dividing by 2, 4 and 8 pages 136-137. **NNN Stage 6 Part B:** Doubling and halving as a x strategy p.31 Using doubles to work out x and / facts p.34 **NNN Stage 6 Part C:** Doubling to work out 2x facts p.20-21 **ENP and ANP Multiplication:** Double, double and x by 4 p.18 Multiply by 4 and then double to x by 8 p.21 **FIO** BF3 Factor Puzzles p.11 BF3 Stars and Students p.12 BF3 Digital Delights p.13 BF 3 Multiplie Mirrors p.21 N7/8 Link Table Tricks p.2 N7/8 Link Factor Fun p.5	Sumdog Level 7 -Doubling multiples of 10 and 100 -Halving Multiples of 10 and 100 Sumdog Level 6 -Rounding 2 digit or 3 digit numbers to the … -Dividing 2 digit or three digit numbers by …	Arrow Cards Turtle NNN Stage 6 Part B: Double and half dominoes p.52 Double it and halve it p.53
	2. Solve x and ÷ problems by adding and subtracting.	**NZCM-** Solving "How many sets of…? Division problems using addition and multiplication pages 122-127. **NNN Stage 6 Part C:** Sharing division problems p.15-16 Using x and / problems to determine the number of sets p.22-23 **ENP and ANP Multiplication:** Adding or taking away one group p.26	Year 6 Operations with Number -Are you ready? -Adding Colossal Columns -Subtracting Colossal Columns Year 6 Operations with Number (something easier) -Column addition -Column Subtraction	Arrow Cards NNN Stage 6 Part B: I have, who has… p.46 NNN Stage 6 Part C: Monster snap p.36 Easy peasy p.33

		NNN Stage 6 Part B: Using repeated addition and x facts as a division strategy p.15-16		
	3. Solve x and ÷ problems using reversing.	**NZCM-** Dividing using multiplying pages 128-135. **NNN Stage 6 Part A:** Changing number order as a x strategy p.31-34 **NNN Stage 6 Part B:** Using x to solve some division problems p.17 Using reversibility as a division strategy p.29 ***NZCM-** Multiplying by changing the order pages 116-117. **ENP and ANP Division:** Reversibility (1) p.26 Reversibility (2) p.27 **FIO** N2-3 Wheel and Deal p.15 N2-3 Stepping Out p.16 BF2-3 Heading for Home p.11 N7/8 Link Container Contents p.13 N2-3 High Flyers p.14 BF 2-3 Times Up p.8 NS&AT2-3.1 Keeping Score p.6-7. **ENP and ANP Multiplication:** Turn abouts p.27 Extending facts-know 1 know 4 p.28 Changing the order to x more easily p.29	<u>Year 6 Operations with Number (something easier)</u> -Multiplication Facts -Remainders by Tables <u>Year 6 Operations with Number</u> -Contracted Multiplication -Short Division -Problems: Times and Divide <u>Year 6 Operations with Number (something harder)</u> -Long Multiplication -Long Division	Multiplication Grid Game
	4. Solve x and ÷ problems using	**NNN Stage 6 Part A:** Targeting easy numbers as a multiplication strategy p.35-41 Using a number line as a	<u>Year 6 Rounding and Place Value (something easier)</u> Nearest 10? Nearest 100? Expanding Numbers	Multiplication Grid Game <u>NNN Stage 6 Part A:</u> Beans game p.50

	rounding and compensation.	division strategy p.47 **NNN Stage 6 Part B:** Using compensation p.5-14 Using compensation from tidy numbers as a division strategy p.42 **ENP and ANP Division:** Compensating from tidy numbers p.34 **NNN Stage 6 Part C:** x by taking some off and putting some on p.8-14 **NZCM-** Using times 5 pages 104-107 **NNN Stage 6 Part A:** Using 5x tables to solve other problems p.21-23 **NZCM-**. Multiplying by taking some off or putting some on pages 112-115 **ENP and ANP Division:** ½ and ½ again to divide by 9 p.25 Division from x (1) p.31` Division from x (2) p.32 Division facts (1) p.35 Division facts (2) p.36 **FIO** N7/8.1 Fives and Tens p.4-5. **ENP and ANP Multiplication:** Strategies to x by 5 p.30 Strategies for x by 6 p.19 Strategies for x by 7 p.20 **FIO** Link 2 Planting with the Whanau p.6 **ENP and ANP Multiplication:** Adding and subtracting to x by 9 p.22	Making numbers count Making big numbers count <u>Year 6 Rounding and Place Value</u> Are you ready? Expanded Notation Nearest Whole Number Place Value to Thousands Nearest 1000? TEST <u>Year 6 Rounding and Place Value (Something harder)</u> -Rounding Numbers <u>Year 5 Multiplication and Division (Something easier)</u> -Groups of Ten -Groups of Four -Groups of Seven -Groups for Nine -Dividing Tens -Remainders by Arrays <u>Year 5 More Division</u> -Are you ready? -Dividing sixes -Dividing sevens -Dividing eights -Dividing Nines -Division Facts -TEST	<u>NNN Stage 6 Part C:</u> Multiplication race p.38 Links x and / p.47

		*ENP and ANP Division: Division problems no remainders p.28 Division problems with remainders p.33 Remainders (1) p.29 Remainders (2) p.30.		
	5. Solve × and ÷ problems using multiplication by tens and hundreds, thousands and other numbers.	**NZCM-** Multiplying Tens pages 108-111. Nesting Numbers pages 100-103 **NNN Stage 6 Part A:** Multiplying tens, hundreds and thousands p.24-30 Managing large numbers as a multiplication strategy p.42-46 **NNN Stage 6 Part C:** Working with place value in whole numbers (part 1) p.5-7 Working with place value in whole numbers (part 2) p.17-18 **FIO** N3.1 Standing Room Only p.4 N3.1 Tens Time p.8 NS 7/8 Link it Pays to Win p.18 **ENP and ANP Multiplication:** Multiplying by 10s p.24 Multiplying by 10, 100 and 1000 p.25 **NNN Stage 6 Part B:** Using place value as a × strategy p.18-20 Using place value as a division strategy p.21-27	<u>Year 6 Decimal Power</u> -Multiply Decimals: 10, 100, 1000 <u>Year 6 Decimal Power (something easier)</u> -Multiplying by 10, 100, 1000 -Nearest whole number <u>Year 6 Decimal Power (something harder)</u> -Divide decimals: 10, 100, 1000 -Decimal by whole number	Multiplication Grid Game Target <u>NNN Stage 6 Part A:</u> Place Value game p.54
	E1. Use more than one strategy when solving × and ÷ problems.	**NZCM-** Multiplying and Dividing by choosing a strategy pages 138-141. Solving problems with addition, subtraction, multiplication and division pages 142-149.	<u>Year 6 Operations with Number</u> -Contracted Multiplication -Short Division -Problems: Times and Divide <u>Year 6 Operations with Number (something harder)</u>	Multiplication Grid Game

			-Long Multiplication -Long Division	
		NNN Stage 6 Part C: Combing x / + - strategies p.26 *Recording answers with a variety of equations p.24-25 **FIO** BF2.1 Dazzler Digs On p.19 BF2.1 Pocket Money p.15 BF2-3 Thirty One or More p.4 NS&AT7/8.1 Choice Calculations NS&AT7/8.1 Splitting Numbers p.2 NS&AT7/8.1 Hit the Target p.7 NS&AT7/8.1 Pathways p.8		
	E2. Choose the most efficient strategy when solving x and ÷ problems.	**NZCM-** Multiplying and Dividing by choosing a strategy pages 138-141. ***NZCM-** Solving problems with addition, subtraction, multiplication and division pages 142-149. **NNN Stage 6 Part C:** Combing x / + - strategies p.26 *Recording answers with a variety of equations p.24-25 **FIO** BF2.1 Dazzler Digs On p.19 BF2.1 Pocket Money p.15 BF2-3 Thirty One or More p.4 NS&AT7/8.1 Choice Calculations NS&AT7/8.1 Splitting Numbers p.2 NS&AT7/8.1 Hit the Target p.7 NS&AT7/8.1 Pathways p.8	<u>Year 6 Operations with Number</u> -Contracted Multiplication -Short Division -Problems: Times and Divide <u>Year 6 Operations with Number (something harder)</u> -Long Multiplication -Long Division	Multiplication Grid Game
7	**1. Solve x and ÷ problems using compensation from tidy numbers.**	**NZCM S7 AM Bk 1-** Multiplying using rounding and compensating pages 44-47. **ENP and ANP Multiplication:** Compensating with tidy numbers (1) p.33	<u>Year 7 Number Rules (something easier)</u> -Place Value to Thousands -Multiplication facts -Nearest Whole Number <u>Year 7 Number Rules</u> -Rounding numbers -Place value to Millions	The Card Game Multiplication Grid Game

		Compensating with tidy numbers (2) p.34 **NZCM S7 AM Bk 1-** Dividing using two different strategies pages 48-51. **NNN Stages 7 & 8 Part B:** Using tidy numbers with x and division problems p.21-22 **Number Property Sheets Book 6:** Multiplication Smorgasbord p.47-48 Multiplication Smorgasbord p.50 **FIO** N3.2 Multiple Methods p.10-11 N3-4.1 Hard Times p.15 N3-4.1 Multiplication Roundabouts p.16 NS&AT 3.1 What's Best? p.6-7 N3-4.1 Division Delights p.18	-Highest Common Factor -Rounding Decimals Year 7 Operations with Number Estimation: Multiply and Divide Long Multiplication	
	2. Solve x and ÷ problems using place value.	**NZCM S7 AM Bk 1-** Multiplying using place value pages 40-43. **ENP and ANP Multiplication:** Using place value (1) p.30 Using place value (2) p.31 **NNN Stages 7 & 8 Part A:** Identifying place value p.13-16 Making groupings of 10,100 and 1000 p.19-20 **NNN Stages 7 & 8 Part B:** Using place value with x and division problems p.17-20 **FIO** N3 High Powered Thinking p.29 N3.2 Singing Up a Storm p.7 N3.2 Booked! p.8-9 N3.2 That Old? p.12-13 N3.2 Sweet Thoughts p.15	Year 7 Operations with Number (something easier) -Contracted multiplication Year 7 Operations with Number (something harder) Divide Decimals: 10, 100, 1000	Thousands Book Game- Secret Number Multiplication Grid Game Target Number Fans AM/AP Tens Frames Arrow Cards

		N3.3 What a View! p.12 N3-4.1 Lookalike p.17 N3-4.3 Dog's Dinner p.14 BF3-4 Trying Times p.2 BF3-4 Eleventh Heaven p.3 NS&AT 4.1 The Greenhouse Effect p.9		
	3. Solve x and ÷ problems using reversibility.	**NZCM S7 AM Bk 1-** Exploring Multiplication and Division pages 68-70 Page 71 Pages 72-73 Page 73 **NNN Stages 7 & 8 Part C:** Solving division problems by reversals p.29	Year 7 Fraction Rules (something harder) -Highest common factor -Lowest common multiple	Multiplication Grid Game
	4. Solve x and ÷ problems using proportional adjustment: Doubling and Halving, Trebling and Thirding.	**NZCM S7 AM Bk 1-** Multiplying using proportional adjustment pages 52-55 **Number Property Sheets book 5 and 6:** Cut and Paste p.49-53 Cut and Paste p.54-55 **Number Property Sheets x&/:** Cut and Paste **NZCM S7 AM Bk 1-** Dividing using proportional adjustment pages 56-59. **NZCM S7 AM Bk 1-** Dividing by changing both numbers pages 60-63. *__NZCM S7 AM Bk 1-__ Multiplying and dividing using proportional adjustment pages 64-65 **NZCM S7 AM Bk 1-** Multiplying by 25 pages 66-67. *__FIO__ NS&AT3.2 Horsing Around p.1		The Card Game

		FIO NS 7/8.1 Double and Halve p.11 NS&AT2-3.1 Clean Cars p.18-19 NS&AT2-3.2 Fair Mix p.11 **FIO** NS 7/8 Link Division Dilemmas p.24 See **Problem Progressions AA-AM Multiplication and Division-** questions for follow up (there are 3 lots of these under similar strategies) **ENP and ANP Multiplication:** Proportional Adjustment p.35 **NNN Stages 7 & 8 Part B:** Using doubling and halving with x problems p.9-14 Using trebling and thirding with x problems p.15-16		
	5. Solve x and ÷ problems by expressing remainders as fractions, decimals or whole numbers.	**NZCM S7 AM Bk 1-** Dividing with remainders pages 74-77. **Number Property Sheets x&/:** Remainders Remainder *** NZCM S7 AM Bk 1-** Remainders on the calculator pages 114-115. **NNN Stages 7 & 8 Part B:** Expressing remainder from division problems in different ways p.31 **FIO** BF3 It remains to be seen p.22 N7/8 4.3 Digit Challenge p.18 N7/8 4.5 Revising Remainders p.1 N7/8 4.5 Reminder Bingo p.2 NS&AT3.1 Just Right! P.8-9 NS&AT3.2 Triple Trouble p.1	Year 7 Decimal Power -Multiply Decimals: 10, 100, 1000 -Divide Decimals: 10, 100, 1000 -Decimal by Whole Number TEST Year 7 Decimal Power (Something easier) Dividing by 10, 100, 1000 Multiplying by 10, 100, 1000 Nearest Whole Number Year 7 Decimal Power (Something harder) Decimal by decimal	

		N7/8.3 Team Leaders p.10		
		NZCM S7 AM Bk 1- Multiplying using place value and written forms pages 106-109. **NZCM S7 AM Bk 1-** Dividing using place value and written forms pages 110-113. **ENP and ANP Multiplication:** Extended Multiplication p.40 Written Multiplication (1) p.41 Written Multiplication (2) p.42 Written Multiplication (3) p.43 Written Multiplication (4) p.44 **ENP and ANP Division:** Written division (1) (2) (3) (4) (5) (6) (7) pages 39-45 See **Problem Progressions AA-AM Multiplication and Division-** for follow up questions. **FIO** N3-4.3 Number Patterns p.8-9 N3-4.3 How Many? P.12-13 N 7/8.3 Orchard Antics p.23 N7/8.5 Plastic Fantastic p.17 NS7/8 Link- Keep your Shirt on p.23 NS7/8.2 No Space to Spare p.18 NS&AT 3-4.1 Tile the Town-Tiny! P.20-21 **NNN Stages 7 & 8 Part A:** Moving between compact and expanded forms p.17-18	<u>Year 8 Operations with Number (something easier)</u> -Multiplication Facts -Division Facts -Short Division <u>Year 8 Operations with Number</u> -Long Division <u>Sumdog Level 8</u> -Multiplying 2 digiti numbers by 1 digit numbers -Dividing 2 digit numbers by 1 digit numbers with remainders	Multiplication Grid Game Algorithm
	6. Solve x and ÷ problems using standard written forms.			
	E1. Use more than one strategy when solving x and ÷ problems and use the most efficient	**NZCM S7 AM Bk 1-** Multiplying by choosing a strategy pages 78-85. **Number Property Sheets x&/:** Multiplication Smorgasboard p.1-2 Multiplication Smorgasboard-Algebra p.3-6		Create and answer multiplication and division questions using as many strategies as possible.

	strategy.	Cut and Paste p.7-8 **NZCM S7 AM Bk 1-** Dividing by choosing a strategy pages 86-95 *** NZCM S7 AM Bk 1-** Order of Operations pages 122-125 *** NZCM S7 AM Bk 1-** Solving problems using all four operations pages 126-135. **FIO** BF Making Numbers p.24 N3.1 Dead Calculators p.19 N3.1 Speedy Types p.21 N3.1 Human Pyramids p.23 N3.3 Wheels Galore p.19 N3-4.1 Think Tank p.20 N 3-4.2 Oceans Apart p.4 N3-4.2 Food for all p.5 N3-4.3 Number Patterns p.8 N3.3 Easy Nines p.14-15 N7/8.5 Order of Operations p.6 N7/8.5 Operations Checker p.7		