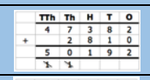
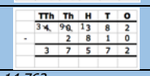
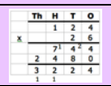
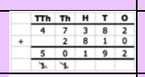
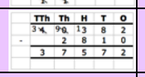
Maths Target Sheet – Stage 5

WTS (5.0-5.2)	EXS (5.3 - 5.4)	GDS (5.5)

Big Ideas				**Connections**	
*1a. I know the value of digits in 7-digit numbers *e.g. value of 7 in 276,541*				*1c. I can read and write numbers to at least 1,000,000 (7-digits)	
*2a. I understand negative numbers in context *e.g. temperature*				*2c. I can count forwards and backwards from negative whole numbers, through zero, to positive whole numbers *e.g. -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, …*	
*3a. I can order numbers to at least 1,000,000		*3b. I can compare numbers to at least 1,000,000		*3c. I can read and write numbers to at least 1,000,000 (7-digits)	
4a. I can round any number to 1,000,000 to the nearest 1000, 10,000		4b. I can round any number to 1,000,000 to the nearest 100,000		*4c. I can read and write numbers to at least 1,000,000 (7-digits)	
				4d. I can round any number to 1,000,000 to the nearest 10, 100	
				4e. I can use rounding to check answers to addition and subtraction calculations and determine, in the context of a problem, levels of accuracy	
5a. I can find the rule to describe number sequences				*5c. I can read and write numbers to at least 1,000,000 (7-digits)	
*6a. I can solve addition multi-step problems in contexts, deciding which operations and methods to use and why		*6b. I can solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why		6c. I can solve number problems that involve the objectives above	
				6d. I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	
				*6e. I use formal written methods to add whole numbers with more than 4 digits 	
				*6f. I can use formal written methods to subtract whole numbers with more than 4 digits with 2 or more exchanges 	
				*6g. I can add numbers mentally with increasingly large numbers using place value to help *e.g. 12,462 + 2300 = 14,762*	
				*6h. I can subtract numbers mentally with increasingly large numbers *e.g. 12,462 – 2,300 = 10,162*	
				6i. I can calculate the perimeter of a shape made of rectangles when there are missing measurements	
*7a. I can simplify mental calculations by manipulating the commutative law *e.g. 53 – 82 + 47 = 53 + 47 – 82 = 100 - 18*		*7b. I can manipulate calculations to make them simpler to calculate (same difference/adjusting/compensating)		*7c. I can choose the most efficient operation to use to solve problems involving addition, subtraction, multiplication and division.	
*8a. I can multiply TO x TO using long multiplication 		*8b. I can multiply HTO x TO using long multiplication 		8c. I can pattern spot and make generalisations about my times tables	
				8d. I can use estimation with the 4 operations	
*9a. I can multiply and divide whole numbers by 10, 100, 1000 *e.g. 134,500 ÷ 100 = 1345*		*9b. I can multiply and divide decimal numbers by 10, 100, 1000 *e.g. 2764.5 ÷ 10 = 276.45*		9c. I can use powers of 10 to simplify decimal multiplication	
*10a. I can divide ThHTO ÷ O using short division *e.g. 2352 ÷ 6*		*10b. I can divide ThHTO ÷ O using short division and interpret remainders appropriately for the context *e.g. How many standard egg-boxes will you need to pack 1000 eggs?*		10c. I can pattern spot and make generalisations about my times tables	
*11a. I can identify multiples of 1-digit numbers *e.g. 49 is a multiple of 7*		*11b. I can identify common multiples of two numbers *e.g. 6 is a multiple of 2 and 3*		8c.I can pattern spot and make generalisations about my times tables	
*12a. I can find factor pairs of a number *e.g. 1 & 12, 2 & 6, 3 & 4 for 12*		*12b. I can identify common factors of two numbers *e.g. 6 is a factor of 18 and 60*		8c.I can pattern spot and make generalisations about my times tables	
13a. I use the terms factor and multiple when describing composite (non-prime) numbers *e.g. "10 is a multiple of 2, 5 and 10. Its factors are 1, 2, 5 and 10".*		13b. I can explain prime numbers using the terms factor and multiple *e.g. 13 is a prime number because it has only two factors. It's a multiple of only 1 and 13.*		13c. I can explain and calculate prime factors for numbers to 30 *e.g. The factors of 18 are 1, 2, 3, 6, 9, 18. So the prime factors are 2 and 3 because 2 x 3 x 3 = 18*	
*14a. I can build and recognise square numbers and the notation for squared numbers (^{2})		14b. I can build and recognise cube numbers and the notation for cubed numbers (^{3})		14c. I can construct equivalence statements with squared numbers *e.g. 3 x 270 = 3 x 3 x 9 x 10 = 9^2 x 10*	
				14d. I can estimate the volume of a cuboid made from 1cm^3 cubes	
15a. I can work out and then recall prime numbers up to 19		*15b. I can establish whether a number up to 100 is prime			
16a. I can solve multiplication problems involving brackets *e.g. 5(4+7)*				16c. I can construct equivalence statements *e.g. 4 x 35 = 2 x 2 x 35*	
*17a. I can solve problems using a combination of addition, subtraction, multiplication and division.		*17b. I can solve problems involving multiplication and division including scaling by simple fractions *e.g. Adapt for ¼ of the amount*		*17c. I can solve problems involving multiplication and division and problems involving simple rates 17d I can solve problems involving converting between units of time	
18a. I can use estimation with the 4 operations		18b. I can use estimation with measure			
*19a. I can compare fractions whose denominators are all multiples of the same number		*19b. I can order fractions whose denominators are all multiples of the same number			
20a. I can represent mixed numbers and improper fractions e.g. $3\frac{1}{2}$ or $\frac{15}{4}$		20b. I can write mathematical statements using mixed and improper fractions e.g. $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$		20c. I can convert mixed numbers to improper fractions e.g. $4\frac{1}{3}=\frac{13}{3}$	
*21a I can add fractions with denominators that are multiples of the same number *e.g.* $\frac{1}{4}+\frac{1}{8}$ (Use equivalent fractions)		*21b. I can subtract fractions with denominators that are multiples of the same number e.g. $\frac{4}{6}-\frac{1}{3}$		21c. I can add fractions with the same denominator	
*22a. I can write decimal numbers as fractions e.g. 0.71 = $\frac{71}{100}$				22c. I can describe decimal numbers as tenths or hundredths (Dual counting)	
23a. I can multiply proper fractions, decimals and percentages by whole numbers supported by different representations *e.g.* $\frac{1}{3}$ x 6		23b. I can multiply mixed numbers by whole numbers supported by different representations e.g. $2\frac{2}{3}$ x 4			
24a. I can recognise the relationship between tenths, hundredths and thousandths		24b. I can use the relationship between tenths, hundredths and thousandths		*24c. I can read and write numbers with up to 3 decimal places	

				*24d. I can divide numbers ThHTO ÷ O and express remainders as a fraction or decimal e.g. 98 ÷ 4 = 24 r2 = $24\frac{2}{4}$ = 24.5	
				24e. I can solve problems involving number up to 3 decimal places	
*25a. I can order numbers with up to 3 decimal places		*25b. I can compare numbers with up to 3 decimal places		25c. I can solve problems involving number up to 3 decimal places	
26a. I can round decimals with 2 decimal places to the nearest whole number		26b. I can round decimals with 2 decimal places to 1 decimal place (1dp)		26c. I can solve problems involving number up to 3 decimal places	
*27a. I can write percentages as a fraction with a denominator 100 *e.g.* $\frac{63}{100}$ = 63%		*27b. I can write percentages as a decimal *e.g. 38% = 0.38*		27c. I recognise the per cent symbol (%) and understand that percent relates to 'number of parts per 100'	
28a. I can measure and estimate perimeter		28b. I can estimate and calculate area		*28c. I can estimate the area of irregular shapes in square centimetres (cm²) or square metres (m²)	
*29a. I can measure angles in degrees (°) using a protractor		*29b. I can draw given angles using a protractor		29c. I can know angles are measured in degrees	
30a. I can identify angles at a point and 1 whole turn (total 360°)		30b. I can identify angles at a point on a straight line and half a turn (total 180°)		30c. I know a quarter turn is 90° and a three-quarter turn is 270°	
31a. I can estimate and compare acute and obtuse angles		31b. I can estimate and compare reflex angles			
32a. I can use the properties of other quadrilaterals to work out missing lengths *e.g. rhombus has 4 equal edges*		32b. I can use the properties of quadrilaterals to work out missing angles *e.g. trapezium's interior angles add up to 360°*		32c. I can identify cubes and other cuboids from 2-D representations	
				*6g. I can add numbers mentally with increasingly large numbers using place value to help *e.g. 12,462 + 2300 = 14,762*	
				*6h. I can subtract numbers mentally with increasingly large numbers *e.g. 12,462 – 2,300 = 10,162*	
33a. I can reflect a shape in a horizontal or vertical axis and describe its transformation knowing that its shape hasn't changed		33b. I can translate a shape in the first quadrant and describe its transformation knowing that its shape hasn't changed		33c. I can work out if a shape has been reflected or translated	
34a. I can solve problems by comparing data in a line graph		34b. I can solve sum and difference problems using data in a line graph		*34c. I can read and interpret information in timetables	
				*6g. I can add numbers mentally with increasingly large numbers using place value to help *e.g. 12,462 + 2300 = 14,762*	
				*6h. I can subtract numbers mentally with increasingly large numbers *e.g. 12,462 – 2,300 = 10,162*	

Fluency					
34. I can read Roman numerals up to 1,000 (M)		40. I can find the rule to describe number sequences		*46. I can establish whether a number up to 100 is prime	
35. I can read years written in Roman numerals *e.g. MMXV = 2015*		*41. I can solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why		*47. I can identify common multiples of two numbers *e.g. 6 is a multiple of 2 and 3*	
36. I can count forwards in steps of powers of 10 *e.g. 10, 100, 1000, 10,000* from zero		42. I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy		*48. I can identify common factors of two numbers *e.g. 6 is a factor of 18 and 60*	
37. I can choose the most efficient strategy to add and subtract mentally (partitioning, doubles/near doubles, bridging, friendly numbers, adjusting and same difference)		*43. I can multiply HTO x TO using long multiplication 		*49. I can solve problems which require knowing decimal equivalents of ½, ¼, ⅕, ⅖, ⅘	
*38. I use formal written methods to add whole numbers with more than 4 digits 		*44. I can multiply and divide whole numbers by 10, 100, 1000 *e.g. 134,500 ÷ 100 = 1345*		*50. I can solve problems which require knowing percentage equivalents of ½, ¼, ⅕, ⅖, ⅘	
*39. I can use formal written methods to subtract whole numbers with more than 4 digits with 2 or more exchanges 		*45. I can multiply and divide decimal numbers by 10, 100, 1000 *e.g. 2764.5 ÷ 10 = 276.45*		51. I can understand and use approximate equivalences between metric and imperial units.	
52. I can convert between units of time					