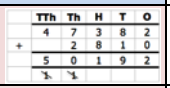
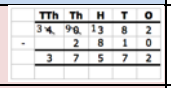
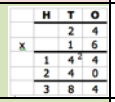
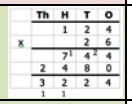
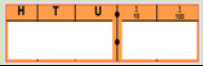
Mathematics Assessment Criteria: Year *5* denotes MET + mastery indicators

Year 5 Stage 1		Year 5 Stage 2		Year 5 Stage 3 MET	
I can read and write numbers to at least 1,000,000 (7-digits) and determine the value of each digit		I can order numbers to at least 1,000,000		I can compare numbers to at least 1,000,000	
I can count forwards in steps of powers of 10 *e.g. 10, 100, 1000, 10,000* from zero		I can count forwards in steps of powers of 10 *e.g. 10, 100, 1000, 10,000* from any given number		I can count backwards in steps of powers of 10 *e.g. 10, 100, 1000, 10,000* from any given number	
I understand negative numbers in context *e.g. temperature*		I can count forwards from negative whole numbers, through zero, to positive whole numbers *e.g. -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, …*		I can count backwards from positive whole numbers, through zero, to negative whole numbers *e.g. 3, 2, 1, 0, -1, -2, -3, -4…*	
I can round any number to 1,000,000 to the nearest **10**, **100**		I can round any number to 1,000,000 to the nearest **1000**, **10,000**		I can round any number to 1,000,000 to the nearest **100,000**	
I can find the rule to describe number sequences *e.g. 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$… is add $\frac{1}{2}$ or 1.5, 1.3, 1.1, 0.9… is subtract 0.2*		I can solve project-based problems that involve the objectives above		I can solve problems that involve the objectives above.	
I can solve number problems that involve the objectives above		I can read Roman numerals up to 1,000 (M)		I can read years written in Roman numerals *e.g. MMXV = 2015*	
I use formal written methods to add whole numbers with more than 4 digits 		I can use formal written methods to subtract whole numbers with more than 4 digits with 2 or more exchanges 			
I can add numbers mentally with increasingly large numbers using place value to help *e.g. 12,462 + 2300 = 14,762*				I can subtract numbers mentally with increasingly large numbers *e.g. 12,462 – 2,300 = 10,162*	
I can solve addition multi-step problems in contexts, deciding which operations and methods to use and why		I can solve subtraction multi-step problems in contexts, deciding which operations and methods to use and why		I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	
I can multiply **ThHTO x O** using short multiplication 		I can multiply **TO x TO** using long mulitplication 		I can multiply **HTO x TO** using long multiplication 	
		I can multiply numbers mentally, using known facts *e.g. 32 x 7*		I can divide numbers mentally, using known facts *e.g. 210 ÷ 60*	
I can divide **ThHTO ÷ O** using short division *e.g. 2352 ÷ 6*		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?*		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	
I can multiply and divide whole numbers by 10, 100, 1,000 using a *Place Value Slider* to help 		I can multiply and divide whole numbers by 10, 100, 1000 *e.g. 134,500 ÷ 100 = 1345*		I can multiply and divide decimal numbers by 10, 100, 1000 *e.g. 2764.5 ÷ 10 = 276.45*	
I can identify **multiples** of 1-digit numbers *e.g. 49 is a mutliple of 7*		I can find **factor pairs** of a number *e.g. 1 & 12, 2 & 6, 3 & 4 for 12*		I can identify **common factors** of two numbers *e.g. 6 is a factor of 18 and 60*	
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".*		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.*		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*	
I can represent **square numbers** using resources *e.g. counters*		I can recognise square numbers and the notation for squared numbers (^{2})		I can build and recognise **cube numbers** and the notation for cubed numbers (^{3})	
I can work out if a number up to 19 is prime		I can recall **prime numbers** up to 19 *e.g. 2, 3, 5, 7, 11, 13, 17, 19*		I can establish whether a number up to 100 is prime	
I can use the equals sign to show equivalence *e.g. 13 + 24 = 12 + 25*		I can explain how the equal sign shows **equivalence**		I can solve missing number problems *e.g. 33 = 5 x ?*	
I can solve multiplication problems involving brackets *e.g. 5(4+7)*		I can construct equivalence statements *e.g. 4 x 35 = 2 x 2 x 35*		I can construct equivalence statements with squared numbers *e.g. 3 x 270 = 3 x 3 x 9 x 10 = 9^2 x 10*	
I can choose which operation to use to solve problems involving addition, subtraction, multiplication and division.		I can solve problems involving multiplication including using factors and multiples, squares and cubes		I can solve problems involving division including using factors and multiples, squares and cubes	
I can solve problems using a combination of addition, subtraction, multiplication and division.		I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates *e.g. Adapt a recipe for ¼ of the amount*		I can solve problems involving addition, subtraction, multiplication and division and a combination of these, understanding the meaning of the equals sign	

Mathematics Assessment Criteria: Year *5* denotes MET + mastery indicators

I can compare fractions whose denominators are all multiples of the same number		I can order fractions whose denominators are all multiples of the same number			
I can identify and write equivalent fractions of a given fraction represented visually including tenths and hundreds *e.g.* $\frac{4}{10} = \frac{40}{100}$		I can recognise mixed numbers and improper fractions e.g. $3\frac{1}{2}$ or $\frac{15}{4}$ and convert from one to the other		I can write mathematical statements using mixed and improper fractions e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$	
I can add and subtract fractions with the same denominator		I can add fractions with denominators that are multiples of the same number *e.g.* $\frac{1}{4} + \frac{1}{8}$		I can subtract fractions with denominators that are multiples of the same number e.g. $\frac{4}{6} - \frac{1}{3}$	
I can read and write decimal numbers as fractions e.g. $0.71 = \frac{71}{100}$		I can multiply proper fractions by whole numbers supported by different representations *e.g.* $\frac{1}{3}$ x 6		I can multiply mixed numbers by whole numbers supported by different representations e.g. $2\frac{2}{3}$ x 4	
I can recognise and use thousandths and relate them to tenths		I can recognise and use thousandths and relate them to hundredths		I can recognise and use thousandths and relate them to decimal equivalents	
I can read and write numbers with up to 3 decimal places		I can order numbers with up to 3 decimal places		I can compare numbers with up to 3 decimal places	
I can round decimals with 2 decimal places to the nearest whole number		I can round decimals with 2 decimal places to 1 decimal place (1dp)		I can solve problems involving number up to 3 decimal places	
I recognise the per cent symbol (%) and understand that **percent** relates to 'number of parts per 100'		I can write percentages as a fraction with a denominator 100 *e.g.* $\frac{63}{100}$= 63%		I can write percentages as a decimal *e.g. 38% = 0.38*	
I can solve problems which require knowing decimal equivalents of ½, ¼, ⅕, ⅖, ⅘		I can solve problems which require knowing percentage equivalents of ½, ¼, ⅕, ⅖, ⅘		I can solve problems which require knowing fractions with a denominator of a multiple of 10 or 25	
I can convert between different units of length *e.g. mm & cm, cm & m, m & km*		I can convert between different units of mass *e.g. grams & kilogram*		I can convert between different units of volume *e.g. millilitres and litres*	
I can convert between centimetres and inches using the approximate equivalence of 2.54cm = 1 inch		I can convert between kilograms and pounds using the approximate equivalence of 1kilogram = 2.2 pounds (mass NOT money)		I can convert between litres and pints using the approximate equivalence of 1 litre = 1.76 pints	
I can measure the **perimeter** of a shape made of rectangles in centimetres and metres		I can calculate and compare the **area** of rectangles (including squares), including using standard units, square centimetres (cm²) and square metres (m²)		I can estimate the **area** of irregular shapes in square centimetres (cm²) or square metres (m²)	
I can calculate the **perimeter** of a shape made of rectangles when there are missing measurements		I can estimate the capacity of a container in millilitres and litres		I can estimate the volume of a cuboid made from $1cm^3$ cubes	
I can solve problems involving converting between units of time *e.g. minutes to hours, days to weeks, weeks to months,*		I can use all four operations to solve problems involving length and money with decimal notation, including scaling		I can use all four operations to solve problems involving mass and volume with decimal notation, including scaling	
I can identify cubes and other cuboids from 2-D representations		I can identify prisms and pyramids from 2-D representations		I can draw a line to the nearest millimetre	
I can know angles are measured in degrees		I can estimate and compare acute and obtuse angles		I can estimate and compare reflex angles	
I can measure angles in degrees (°) using a protractor		I can draw given angles using a protractor		I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles	
I can identify angles at a point and 1 whole turn (total 360°)		I can identify angles at a point on a straight line and half a turn (total 180°)		I know a quarter turn is 90° and a three-quarter turn is 270°	
I can use the properties of rectangles to find missing lengths		I can use the properties of other quadrilaterals to work out missing lengths *e.g. rhombus has 4 equal edges*		I can use the properties of quadrilaterals to work out missing angles *e.g. trapezium's interior angles add up to 360°*	
I can **reflect** a shape in a horizontal or vertical axis and describe its transformation knowing that its shape hasn't changed		I can **translate** a shape in the first quadrant and describe its transformation knowing that its shape hasn't changed		I can identify if a shape has been **reflected** or **translated**	
I can complete, read and interpret information in tables, including timetables		I can solve problems by comparing data in a line graph		I can solve comparison, sum and difference problems using data in a line graph	

**up to ten multiples of the number*