

Year 5		Step 17	Step 18
Problem Solving		<ul style="list-style-type: none"> - I can solve number and practical problems using all of my number skills. - I can solve problems involving number up to three d.p. - I can solve problems using multiplication and division and a combination of these including understanding the equals sign. - I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple ratios. - I can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of a multiple of 10 or 25. - I can solve problems using multiplication and division using my knowledge of factors and multiples square and cubes. - Solve problems involving multiplying and adding, including integer scaling problems - I can solve problems involving converting between units of time. - I can use all four operations to solve problems including measure(e.g. length, mass, volume, money) using decimal notation including scaling. 	
Number	Place Value	<ul style="list-style-type: none"> - I can round any 5 number to the nearest 10, 100 and 1000, 10 000 - I can round decimals with one d.p. to the nearest whole number - I can read Roman numerals to 1000 (I – M) - I can read, write, order and compare numbers with up to 2 d.p. I can find complements for 1 with tenths and hundredths (2 d.p.) I can add and subtract 0.01 mentally to other numbers to 2 d.p. 	<ul style="list-style-type: none"> - I can read, write and order numbers to at least 100 000 and determine the value of each digit. - I can put negative numbers onto a number line. - I can round any number up to 1 000 000 to the nearest 10, 100, 1,000, 10 000 and 100 000. - I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents - I can round decimals with two d.p. to the nearest whole number and to one d.p. - I can read, write, order and compare numbers with up to 3 d.p. I can solve problems involving numbers to three d.p.
	Counting	- I can count forwards and backwards in 100 000 from any given number up to 1 000 000.	
	Fractions and Decimals	<ul style="list-style-type: none"> - I can compare and order fractions whose denominators are the same. - I can read and write decimal numbers as fractions over 10 and 100. - I am beginning to add and subtract fractions with the same denominator and multiples of the same number. - I know the decimal equivalents of $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$ and $\frac{4}{5}$. - I can multiply proper fractions by a whole number using materials and diagrams. - I can recognise the percent symbol (%) and understand percent means number of parts per hundred and write percentages as a fraction with a denominator 100 I can simplify fractions > 1 into integers and other fractions. (E.g. $\frac{17}{3} = 5 \frac{2}{3}$) 	<ul style="list-style-type: none"> - I can compare and order fractions whose denominators are multiples of the same number. - I can add and subtract fractions with the same denominator and multiples of the same number. - I can write mathematical statements for addition and subtraction of fractions - I know the decimal equivalents of those with a denominator of a multiple of 5, 10 or 25. - I can multiply mixed numbers by a whole number using materials and diagrams. - I am beginning to use scaling to find equivalent decimal equivalents of non-unit fractions where the denominator is a factor of 100 or multiple of 10. (e.g. $\frac{4}{20} = \frac{2}{10}$ (0.2) or $\frac{20}{100}$ (0.2) - I can recognise the percent symbol (%) and understand percent means number of parts per hundred and write percentages as a fraction with a denominator 100 and as a decimal I can convert integers and fractions into an improper fraction. E.g. $5 \frac{2}{3} = \frac{17}{3}$
Calculating	Addition and Subtraction	<p>I am beginning to add and subtract whole numbers with more than 4 digits using formal columnar addition.</p> <ul style="list-style-type: none"> - I can add and subtract mentally a five digit number and multiple of 10, 100 or 1000, 10 000 or a combination of these (E.g +/- 23 000) - I can use rounding to estimate the answer to a calculation. <p>I am beginning to add and subtract numbers to 2 d.p. using the formal written method.</p>	<ul style="list-style-type: none"> - I can add and subtract mentally a six digit number and multiple of 10, 100 or 1000, 10 000 or a combination of these (E.g +/- 23 000) - I can estimate the answer to a calculation using rounding and say whether my answer is likely. - I can solve addition and subtraction two-step problems in contexts, deciding which operations to use and why. - Can solve more complex one-step problems in contexts, deciding which operations to use and why. I can add and subtract numbers to 2 d.p. using the formal written method.
	Multiplication and Division	<ul style="list-style-type: none"> - I am beginning to recognise and use factor pairs and common factors of two numbers commutatively in mental calculations - I can recall and use mentally multiplication and division facts for all tables up to 12×12 - I can divide a 4-digit number by a one digit number using the formal short-division method without remainders 	<ul style="list-style-type: none"> - I can recognise and use factor pairs and common factors of two numbers commutatively in mental calculations - I can recognise and use multiples in mental calculations - I can divide up to a four-digit number by a one-digit number using the formal short division method with remainders - I can multiply a 2 digit number by a 2 digit number using the formal long

		<ul style="list-style-type: none"> - I can multiply a 2 digit number by a 2 digit number using the expanded long multiplication method. - I can recall prime numbers up to 19 and use the vocabulary of prime factors - I can recognise and use square numbers and their notation. <p>I express non-integer answers to division as a fraction.</p>	<p>multiplication method.</p> <ul style="list-style-type: none"> - I can recognise and use cube numbers and their notation. - I can recall prime numbers up to 19 and use the vocabulary of prime factors non-prime numbers <p>I express non-integer answers to division as a decimal to 1 d.p..</p>
Geometry	Properties of shape	<ul style="list-style-type: none"> - I am beginning to identify 3D shapes, including cubes and cuboids, from 2D representations. - I can identify what acute, obtuse and reflex angles are. <p>I can measure given angles using a protractor to the nearest 1°</p> <ul style="list-style-type: none"> - I can identify multiples of 90 degrees when measuring angles <p>I understand an angle on a single point is a whole turn</p> <p>I can draw polygons accurately using a ruler to the nearest mm and protractor to the nearest 1°</p>	<ul style="list-style-type: none"> - I can identify 3D shapes, including cubes and cuboids, from 2D representations. - I can estimate and compare acute, obtuse and reflex angles. - I can identify missing angles by using my knowledge of angles on a straight line or at a point. - I can use the facts I know about polygons to find missing facts. - I can use angle sum facts and other properties to find missing values. - I use the fact that an angle on a single point is a whole turn to find internal angles of common polygons. - I can use the properties of rectangles to deduce related facts and find missing lengths and angles.
	Position and direction	I can describe position using co-ordinates on a 2D grid in the first quadrant after a reflection in a horizontal or vertical line.	I can describe position using co-ordinates on a 2D grid in the first quadrant after a translation in two different directions (E.g. up and left)
Measurement		<ul style="list-style-type: none"> - I can convert and use fluently between different units of metric measure including g and kg ;l and ml. - I can find the perimeter of a rectangle by using the formula $2l+2b$ using standard units - I can use the formula $L \times B$ to find the area of square/rectangle.. using standard units. - I know and understand all imperial units for measure - I can estimate volume (e.g. using 1 cm³ blocks to build cubes and cuboids) and capacity (e.g. using water). <p>I can find efficient ways to calculate the perimeter of regular shapes.</p>	<ul style="list-style-type: none"> - I can convert and use fluently between different units of metric measure (e.g. km and m; cm and m; cm and mm; g and kg; l and ml). - I can measure and calculate the perimeter of a composite rectilinear figure (including squares) in centimetres and metres. - I can measure and calculate the area of a composite rectilinear figure (including squares) in centimetres and metres. - I can understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. <p>I can use algebraic expressions to represent missing measure problems. (e.g. $4 + 2b = 20$, for a rectangle of side 2 and perimeter 20)</p>
Statistics		I can plot data on a line graph and join the plots to find further (x,y) values.	<ul style="list-style-type: none"> - I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and line graphs . - I can complete, read and interpret information in tables, including time tables. - I can use line graphs to solve simple conversions problems. E.g. Km – m or hours to minutes.