

Year 5/6		Step 18	Step 19
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. - I can solve number problems and practical problems involving a range of ideas - I can solve number problems and practical problems involving negative numbers - I can solve problems which require the 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 addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. - I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. - I can use written division methods in cases where the answer has up to 2 decimal places solve problems which require answers to be rounded to specified degrees of accuracy. - I can use my knowledge of the order of operations to carry out calculations involving the 4 operations. - I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate./ the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts./similar shapes where the scale factor is known or can be found./ the calculation of percentages (for example, of measures such as 15% of 360) and the use of percentages for comparison / involving unequal sharing and grouping using knowledge of fractions and multiples. 	
Number	Place Value	<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. 	<ul style="list-style-type: none"> - I can read, write, order and compare numbers up to 10 000 000 and determine the value of each digit - I can round any number up to 10 000 000 to the nearest 10, 100 and 1000 - I can recognise negative numbers, continue negative number sequences and find missing numbers
	Counting		
	Fractions and Decimals	<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. $5\frac{2}{3} = \frac{17}{3}$ 	<ul style="list-style-type: none"> - I can add and subtract mixed numbers with the same denominator - I can multiply mixed numbers by a whole number - I can partition decimal numbers up to 3 decimal places and state the value of each digit. - I can associate a fraction with division by converting an integer and fraction to an improper fraction. - I can recall and use equivalences between simple fractions and decimals I can place fractions > 1 on a numberline
Calculating	Addition and	<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) 	<ul style="list-style-type: none"> - I can consider whether to solve addition and subtraction calculations mentally or using a written method.

	Subtraction	<ul style="list-style-type: none"> - 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. <p>I can add and subtract numbers to 2 d.p. using the formal written method.</p>	<p>I can explore order of operations (e.g. BODMAS) using brackets.</p> <ul style="list-style-type: none"> - I can use rounding to check answers to calculations
	Multiplication and Division	<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 multiplication method. - 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>	<ul style="list-style-type: none"> - I can use recall of multiplication and division facts up to 12 x 12 to solve other multiplication and division calculations mentally. - I can use knowledge of times tables and place value to multiply 1s.t by 1s e.g. $0.6 \times 4 = 2.4$. - I can divide 3-digit numbers by 2-digit numbers using the formal method without remainders <p>I can multiply 3-digit numbers x 2-digit numbers using long multiplication</p>
Geometry	Properties of shape	<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. 	<ul style="list-style-type: none"> - I can draw 2d shapes using dimensions and angles - I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes - I can illustrate and name parts of circles, including radius, diameter and circumference - I can identify acute and obtuse angles and compare and order angles by size
	Position and direction	<p>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)</p>	<ul style="list-style-type: none"> - I can draw positions of points in the first and second quadrants of a 2D co ordinate grid
Measurement		<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>	<p>I can identify, describe and represent the position of a shape following a reflection</p> <ul style="list-style-type: none"> - I can use, read, write and convert between standard units, converting measurements of length and mass, from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places. - I can convert between miles and kilometres. - I can recognise that shapes with the same areas can have different perimeters and vice versa.
Statistics		<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. 	<p>I can compare a set of data on a table with its representation on a pie-chart.</p>
Algebra			<p>I can interpret problems using simple formulae.</p> <p>I can continue simple linear number sequences.</p> <p>I can express generalisations of a linear number sequence in words.</p>
Ratio and Proportion			<p>I can find simple percentages of quantities (e.g.10%, 25%, 50% and 75%) of quantities</p> <p>I can use concrete materials to solve simple ratio problems.</p> <p>I understand the relationship between common % (E.g. 25% and 50% or 10% and 5%)</p>

