



Year 6 Yearly Overview for maths.

	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
Number / P.V	<p>Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.</p> <p>Round any whole number to a required degree of accuracy.</p> <p>Use negative numbers in context, and calculate intervals across zero.</p>	Solve number and practical problems that involve all of these L.O.	
+ / -	<p>Perform mental calculations, including with mixed operations and large numbers</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations</p> <p>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</p>	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	
X / ÷	<p>Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.</p> <p>Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.</p> <p>Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.</p>	<p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Identify common factors, common multiples and prime numbers</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</p>	
Fractions, decimals and percentages.	<p>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination compare and order fractions, including fractions > 1</p> <p>Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions</p> <p>Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$)</p> <p>Multiply one-digit numbers with up to two decimal places by whole numbers</p> <p>Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison</p>	<p>Divide proper fractions by whole numbers (for example, $\frac{1}{3} \div 2 = \frac{1}{6}$)</p> <p>Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example $\frac{3}{8}$] identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places</p> <p>Solve problems which require answers to be rounded to specified degrees of accuracy</p> <p>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p> <p>Use written division methods in cases where the answer has up to two decimal places</p>	
Measure	<p>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate</p> <p>Recognise when it is possible to use formula for area and volume of shapes</p> <p>Calculate the area of parallelograms and triangles</p>	<p>Use, read, write and convert between standard units, converting measurements of length, mass and volume from a smaller unit of measure to a larger unit, and vice versa, using decimal notation of up to three decimal places</p> <p>Recognise that shapes with the same areas can have different perimeters and vice versa</p>	<p>Convert between miles and kilometres</p> <p>Calculate, estimate and compare volumes of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3]</p>

Time		Use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation of up to three decimal places	
Money			
Geometry	<p>Recognise, describe and build simple 3-D shapes, including making nets</p> <p>Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</p> <p>Draw 2-D shapes using given dimensions and angles</p> <p>Recognise, describe and build simple 3-D shapes, including making nets</p>	<p>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons</p> <p>Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles</p>	
Position		<p>Describe positions on the full coordinate grid (all four quadrants)</p> <p>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes</p>	
Statistics	<p>Interpret and construct pie charts and line graphs and use these to solve problems</p> <p>Calculate and interpret the mean as an average</p>	<p>Interpret and construct pie charts and line graphs and use these to solve problems</p> <p>Calculate and interpret the mean as an average</p>	<p>Interpret and construct pie charts and line graphs and use these to solve problems</p> <p>Calculate and interpret the mean as an average</p>
Ration & proportion	<p>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</p>	<p>Solve problems involving similar shapes where the scale factor is known or can be found</p> <p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p>	
Algebra	<p>Use simple formulae</p> <p>Generate and describe linear number sequences</p> <p>Express missing number problems algebraically</p> <p>Find pairs of numbers that satisfy an equation with two unknowns</p> <p>Enumerate possibilities of combinations of two variables.</p>		

Green: could be covered through topic work. Red: examples of questions. Blue: Links with other areas of maths.