

Name:	Yr6	Class of:
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Mathematics: Planning and Assessment Year 6 43 statements 20 KPIs				
Statements	14	27	41, including all KPI's	For statements to be completely embedded they should be demonstrated in a range of contexts and subject areas in applicable.
Attainment	Year 6 Emerging	Year 6 Developing	Year 6 Secure	

Place Value	Addition, Subtraction, Multiplication & Division	Fractions(including decimals & %)	Ratio & Proportion	Measurement	Properties of shapes
*Read, write, order and compare numbers up to 10 0000 000 and determine the value of each digit.	*Multiply multi-digit numbers up to 4 digits by a two-digit whole number.	Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.	Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.	Draw 2-D shapes using given dimensions and angles.
*Round any whole number to a required degree of accuracy.	*Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.	Compare and order fractions, including fractions >1.	Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.	Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using a decimal notation to up to three decimal places.	Recognise, describe and build simple 3-D shapes, including making nets.
*Use negative numbers in context and calculate intervals across zero.	*Divide numbers up to 4 digits by a two-digit number and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.	Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.	Solve problems involving similar shapes where the scale factor is known or can be found.	Convert between miles and kilometres.	Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.
*Solve number and practical problems that involve all of the above.	*Divide numbers up to 4 digits by 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.	Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $1/4 \times 1/2 = 1/8$ ]	Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.	Recognise that shapes with the same areas can have different perimeters and vice versa.	Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.
	*Perform mental calculations, including with mixed operations and large numbers.	Divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$ ].	<b>Algebra</b>	Recognise when it is possible to use formulae for area and volume of shapes.	Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.
	*Identify common factors, common multiples and prime numbers.	Associate a fraction with division and calculate decimal fractions equivalents [for example, $0.375$ ] for a simple fraction [for example, $3/8$ ].	Use simple formulae.	Calculate the area of parallelograms and triangles.	<b>Position and Direction</b>
	*Use their knowledge of the order of operations to carry out calculations involving the four operations.	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.	Generate and describe linear number sequences.	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ), and extending to other units [for example, mm <sup>3</sup> and km <sup>3</sup> ].	Describe positions on the full coordinate grid (all four quadrants).
	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	Multiply one-digit numbers with up to two decimal places by whole numbers.	Express missing number problems algebraically.		Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
	Solve problems involving addition, subtraction, multiplication and division.	Use written division methods in cases where the answer has up to two decimal places.	Find pairs of numbers that satisfy an equation with two unknowns.		<b>Statistics</b>
	Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.	Solve problems which require answers to be rounded to specified degrees of accuracy.	Enumerate possibilities of combinations of two variables.		Interpret pie charts and line graphs and use these to solve problems.
		Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.			Construct pie charts and line graphs.
					Calculate and interpret the mean as an average