

Key Performance Indicator	Year 6 Milestones - Maths
<p>Number: Number and Place Value</p>	I can read numbers to at least 10,000,000 and determine the value of each digit.
	I can write numbers to at least 10,000,000 and determine the value of each digit.
	I can order numbers to at least 10,000,000 and determine the value of each digit.
	I can compare numbers to at least 10,000,000 and determine the value of each digit.
	I can use negative numbers in context, and calculate intervals across zero.
	I can round any whole number and decimal number.
	I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000.
	I can reason with place value using Year 6 place value skills and knowledge.
<p>Number: Addition and Subtraction</p>	I can perform mental calculations, with mixed operations and large numbers.
	I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
	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.
	I can reason with addition and subtraction using Year 6 skills and knowledge.
<p>Number: Multiplication and Division</p>	I can perform mental calculations, with mixed operations and large numbers.
	I can manipulate numbers and use related facts to calculate.
	I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.
	I can divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division.
	I can divide numbers up to 4 digits and interpret remainders as whole number remainders, fractions, decimals and rounding appropriately for the context.
	I can solve problems and reason involving addition, subtraction, multiplication and division.
	I can solve multi-step problems.
	I can use my knowledge of the order of operations to carry out calculations involving the four operations.
	I can use estimation to check answers to calculations.
	I can identify common factors and common multiples.
	I can identify prime numbers.

Fractions, Decimals and Percentages	I can compare and order fractions, including fractions > 1 .
	I can use common factors to simplify fractions.
	I can use common multiples to express fractions in the same denomination.
	I can add and subtract fractions with different denominators and mixed numbers, using equivalent fractions.
	I can multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$].
	I can divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$].
	I can solve problems which require answers to be rounded.
	I can identify the value of each digit in numbers given to three decimal places.
	I can multiply and divide numbers by 10, 100 and 1,000 giving answers up to three decimal places.
	I can multiply one-digit numbers with up to two decimal places by whole numbers.
	I can use written division methods in cases where the answer has up to two decimal places.
	I can divide a fraction to calculate its decimal equivalent ($0.375 = \frac{3}{8}$).
	I can recall and use equivalences between simple fractions, decimals and percentages, in different contexts.
	I can reason with fractions, decimals and percentages using Year 6 skills and knowledge.
Geometry: Properties of Shape	I can draw 2-D shapes using given dimensions and angles.
	I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.
	I can recognise, describe and build simple 3-D shapes, including making nets.
	I can compare and classify geometric shapes based on their properties and sizes.
	I can find unknown angles in any triangles, quadrilaterals, and regular polygons.
	I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite.
	I can find missing angles.
Measurement	I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
	I can use, read and write different standard units of measure.
	I can convert between miles and kilometres.
	I can 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 decimal notation to up to three decimal places.

Measurement	I can recognise that shapes with the same areas can have different perimeters.
	I can calculate the area of parallelograms and triangles.
	I can recognise when it is possible to use formulae for area and volume of shapes.
	I can calculate, estimate and compare volume 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].
	I can recognise that shapes with the same perimeter can have different areas
I can reason with measurement using year 5 skills and knowledge	
Geometry: Position and Direction	I can describe positions on the full coordinate grid (all four quadrants).
	I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
Statistics	I can interpret pie charts and line graphs and use these to solve problems.
	I can construct pie charts and line graphs and use these to solve problems.
	I can calculate and interpret the mean as an average.
Algebra	I can use simple formulae.
	I can generate and describe linear number sequences.
	I can express missing number problems algebraically.
	I can find pairs of numbers that satisfy an equation with two unknowns.
I can find the value of a letter (eg $a + b = 15$ what is the value of the letters).	
Ratio and Proportion	I can solve problems involving the sizes of two quantities where missing values can be found by using multiplication and division facts.
	I can solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison.
	I can solve problems involving similar shapes where the scale factor is known or can be found.
	I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.