



BRACKENWOOD JUNIOR SCHOOL

Year 6 Mathematics Curriculum Overview

Number and Place Value	Addition and Subtraction	Multiplication and Division	Fractions, Decimals, Percentages and Ratio
<p>I can read, write, order and compare numbers up to 10 000 000 and determine the value of each digit (KPI1)</p> <p>I can recognise the place value of each digit in numbers up to 10 million. (KPI2)</p> <p>I can round any whole number to a required degree of accuracy</p> <p>I can use negative numbers in context, and calculate intervals across zero (KPI3)</p> <p>I can solve number and practical problems that involve all of the above.</p>	<p>I can perform mental calculations, including with mixed operations and large numbers</p> <p>I can use my knowledge of the order of operations to carry out calculations involving the four operations</p> <p>I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why (KPI4)</p> <p>I solve problems involving addition and subtraction</p> <p>I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</p>	<p>I can divide powers of 10 (from 0.01 to 10 million) into 2,4,5 and 10 equal parts. (KPI5)</p> <p>I can mentally multiply a two-digit number by a single digit</p> <p>I can mentally multiply a decimal less than one by a single digit</p> <p>I can mentally multiply and divide any number by 4,5,10,20,25,50 and 100</p> <p>I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication (KPI6)</p> <p>I can 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 (KPI7)</p> <p>I can 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 (KPI8)</p> <p>I can perform mental calculations, including with mixed operations and large numbers</p> <p>I can identify common factors, common multiples and prime numbers</p> <p>I can solve problems involving multiplication and division</p> <p>I can use estimation to check answers to calculations and determine an appropriate degree of accuracy.</p>	<p>I can use common factors to simplify fractions (KPI9)</p> <p>I can use common multiples to express fractions in the same denomination (KPI10)</p> <p>I can compare and order fractions, including fractions > 1</p> <p>I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions (KPI11)</p> <p>I can multiply simple pairs of proper fractions, writing the answer in its simplest form (KPI12)</p> <p>I can divide proper fractions by whole numbers (KPI13)</p> <p>I can associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction</p> <p>I can 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 (KPI14)</p> <p>I can multiply one-digit numbers with up to two decimal places by whole numbers (KPI15)</p> <p>I can use written division methods in cases where the answer has up to two decimal places (KPI16)</p> <p>I can solve problems which require answers to be rounded to specified degrees of accuracy</p> <p>I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p> <p>I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</p> <p>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</p> <p>I can solve problems involving similar shapes where the scale factor is known or can be found</p> <p>I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p>

Measurement	Shapes- Geometry	Shapes- Position and Direction	Statistics	Algebra
<p>I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate</p> <p>I can 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 decimal notation to up to three decimal places (KPI17)</p> <p>I can convert between miles and kilometres</p> <p>I can recognise that shapes with the same areas can have different perimeters and vice versa</p> <p>I can recognise when it is possible to use formulae for area and volume of shapes (KPI18)</p> <p>I can calculate the area of parallelograms and triangles</p> <p>I can calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³) and extending to others[eg. mm³ and km³]. (KPI19)</p>	<p>I can draw 2-D shapes using given dimensions and angles (KPI20)</p> <p>I can recognise, describe and build simple 3-D shapes, including making nets</p> <p>I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons (KPI21)</p>	<p>I can describe positions on the full coordinate grid (all four quadrants) (KPI22)</p> <p>I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>	<p>I can interpret and construct pie charts and line graphs and use these to solve problems (KPI23)</p> <p>I can calculate and interpret the mean as an average. (KPI24)</p>	<p>I can use simple formulae (KPI25)</p> <p>I can generate and describe linear number sequences</p> <p>I can express missing number problems algebraically</p> <p>I can find pairs of numbers that satisfy an equation with two unknowns</p> <p>I can enumerate possibilities of combinations of two variables.</p>