

Year 6 Maths Curriculum

Year 6 should be taught to:

Number Sense	Additive Reasoning	Multiplicative Reasoning	Geometric Reasoning
<ul style="list-style-type: none"> read, write, order and compare numbers up to 10 000 000 and determine the value of each digit 6.1, 6.5, 6.10 round any whole number to a required degree of accuracy 6.1, 6.5, 6.10 use negative numbers in context, and calculate intervals across zero 6.5, 6.6, 6.10 solve number and practical problems that involve all of the above 6.1, 6.5, 6.10 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 6.1, 6.5, 6.7, 6.10, 6.12 use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places 6.1, 6.2, 6.3, 6.5, 6.6, 6.7, 6.8, 6.10, 6.11, 6.12, 6.13 convert between miles and kilometres 6.1, 6.8, 6.10 express missing number problems algebraically 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 use simple formulae 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 generate and describe linear number sequences 6.2, 6.3, 6.6, 6.7, 6.8, 6.11, 6.12, 6.13 find pairs of numbers that satisfy an equation with two unknowns 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 interpret and construct pie charts and line graphs and use these to solve problems 6.2, 6.3, 6.6, 6.7, 6.8, 6.11, 6.12, 6.13 use common factors to simplify fractions; use common multiples to express fractions in the same denomination 6.7, 6.10, 6.12 compare and order fractions, including fractions >1 6.7, 6.10, 6.12 associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$] 6.7, 6.12 recall and use equivalences between simple fractions, decimals and percentages, including in different context 6.7, 6.12 	<ul style="list-style-type: none"> use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places 6.1, 6.2, 6.3, 6.5, 6.6, 6.7, 6.8, 6.10, 6.11, 6.12, 6.13 perform mental calculations, including with mixed operations and large numbers 6.2, 6.3, 6.6, 6.8, 6.11, 6.13 use their knowledge of the order of operations to carry out calculations involving the four operations 6.2, 6.3, 6.6, 6.8, 6.11, 6.13 solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 6.2, 6.6, 6.11 solve problems involving addition, subtraction, multiplication and division 6.2, 6.3, 6.6, 6.8, 6.11, 6.13 use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. 6.2, 6.3, 6.6, 6.8, 6.11, 6.13 solve problems which require answers to be rounded to specified degrees of accuracy 6.2, 6.6, 6.11 express missing number problems algebraically 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 use simple formulae 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 generate and describe linear number sequences 6.2, 6.3, 6.6, 6.7, 6.8, 6.11, 6.12, 6.13 find pairs of numbers that satisfy an equation with two unknowns 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 enumerate possibilities of combinations of two variables 6.2, 6.3, 6.4, 6.6, 6.8, 6.9, 6.11, 6.13, 6.14 solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate 6.2, 6.3, 6.6, 6.7, 6.8, 6.11, 6.12, 6.13 interpret and construct pie charts and line graphs and use these to solve problems 6.2, 	<ul style="list-style-type: none"> use, read, write and convert between standard units, converting measurements of length, mass and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places 6.1, 6.2, 6.3, 6.5, 6.6, 6.7, 6.8, 6.10, 6.11, 6.12, 6.13 solve problems involving addition, subtraction, multiplication and division 6.2, 6.3, 6.6, 6.8, 6.11, 6.13 express missing number problems algebraically 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 use simple formulae 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 generate and describe linear number sequences 6.2, 6.3, 6.6, 6.7, 6.8, 6.11, 6.12, 6.13 find pairs of numbers that satisfy an equation with two unknowns 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 enumerate possibilities of combinations of two variables 6.2, 6.3, 6.4, 6.6, 6.8, 6.9, 6.11, 6.13, 6.14 solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate 6.2, 6.3, 6.6, 6.7, 6.8, 6.11, 6.12, 6.13 interpret and construct pie charts and line graphs and use these to solve problems 6.2, 6.3, 6.6, 6.7, 6.8, 6.11, 6.12, 6.13 multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication 6.3, 6.8, 6.13 divide numbers up to 4 digits by a two-digit whole number using the formal written method of short division where appropriate, interpreting remainders according to the context 6.3, 6.8, 6.13 perform mental calculations, including with mixed operations and large numbers 6.2, 6.3, 6.6, 6.8, 6.11, 6.13 identify common factors, common multiples and prime numbers 6.3, 6.8, 6.13 use their knowledge of the order of 	<ul style="list-style-type: none"> express missing number problems algebraically 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 use simple formulae 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 find pairs of numbers that satisfy an equation with two unknowns 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.11, 6.12, 6.13, 6.14 enumerate possibilities of combinations of two variables 6.2, 6.3, 6.4, 6.6, 6.8, 6.9, 6.11, 6.13, 6.14 draw 2-D shapes using given dimensions and angles 6.4, 6.9, 6.14 recognise, describe and build simple 3-D shapes, including making nets 6.4, 6.9, 6.14 compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons 6.4, 6.9, 6.14 illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius 6.4, 6.9, 6.14 recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles 6.4, 6.14 recognise that shapes with the same areas can have different perimeters and vice versa 6.4, 6.14 calculate the area of parallelograms and triangles 6.4, 6.9, 6.14 recognise when it is possible to use the formulae for area and volume of shapes 6.4, 6.9, 6.14 describe positions on the full coordinate grid (all four quadrants) 6.9, 6.14 draw and translate simple shapes on the coordinate plane, and reflect them in the axes 6.9, 6.14 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]. 6.9, 6.14 solve problems involving similar shapes

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