

Year 6 Mathematics Scheme of Work

Teaching week	iPrimary Maths objectives	Activities
Year 6 Term 1 Week 1	<p>N6.1B Read, write and say aloud numbers written in figures up to and including 10 000 000.</p> <p>N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form.</p> <p>N6.1E Recognise the place value of each digit in a number with 1 or 2 decimal places and write numbers in expanded form.</p> <p>N6.1F Compare and order numbers up to and including 10 000 000 and write statements using inequality signs < or >.</p> <p>N6.1H Round any decimal, up to and including 2 decimal places, to the nearest whole number.</p> <p>N6.3J Multiply and divide whole numbers and decimals by 10, 100 and 1 000, with integer and decimal answers (up to and including 2 decimal places).</p> <p>N6.5C Identify, name, convert and write common equivalent fractions, including $\frac{1}{4}$ and $\frac{3}{4}$ with denominators up to 100, and write these as decimals.</p> <p>N6.5J Read, write, order and compare numbers with a different number of decimal places, up to and including 2 decimal places.</p> <p>N6.5L Solve missing number, fraction and decimal problems.</p>	<p>Read, write and compare 6-digit numbers and know what each digit represents; read, write and compare 1-, 2- and 3-place decimal numbers; multiply and divide by 10, 100 and 1 000; round decimals to nearest tenth and whole number and place on a number line; convert decimals (up to 3 places) to fractions and vice versa.</p>
Year 6 Term 1 Week 2	<p>N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form.</p> <p>N6.1E Recognise the place value of each digit in a number with 1 or 2 decimal places and write numbers in expanded form.</p> <p>N6.2A Add and subtract positive integers of any size up to and including 1 000 000 using mental or formal written methods of column addition and subtraction, where appropriate.</p> <p>N6.2B Add and subtract 1 and 2 place decimals, including more than two amounts of money.</p>	<p>Use mental addition strategies to solve additions including decimal numbers; use column addition to add 5-digit numbers, decimal numbers and amounts of money; solve problems involving number up to 3 decimal places, choose an appropriate method to solve decimal addition.</p>

	<p>N6.2C Add more than two amounts of money.</p> <p>N6.5K Add and subtract 0.01, 0.02, 0.03,... 0.09 to and from a number with 2 decimal places.</p> <p>N6.5L Solve missing number, fraction and decimal problems.</p> <p>G6.1A Solve problems involving money calculations, using all four operations, including rounding answers to the nearest integer denomination and interpreting answers with 1 decimal place.</p>	
<p>Year 6 Term 1 Week 3</p>	<p>N5.4B Introduce BIDMAS (order of operations) for +, −, ×, ÷ only.</p> <p>N6.2A Add and subtract positive integers of any size up to and including 1 000 000 using mental or formal written methods of column addition and subtraction, where appropriate.</p> <p>N6.4E Use priority of operations for calculations including simple powers and brackets.</p> <p>N6.5L Solve missing number, fraction and decimal problems.</p> <p>N6.8A Use formal algebraic notation to express missing number problems.</p> <p>N6.8D Solve equations with two unknowns.</p> <p>N6.8G Simplify expressions by collecting like terms or expanding those involving brackets.</p> <p>N6.8H Be able to substitute values into simple algebraic expressions.</p> <p>G6.1F Find perimeters of regular and irregular polygons by measuring and by calculating.</p> <p>G6.1I Solve perimeter and area problems involving rectangles, squares and triangles.</p> <p>G6.2A Know that angles on a straight line add to 180°, and find one missing angle on a straight line; recognise that angles where they meet at a point are on a straight line and use this to find missing angles; recognise vertically opposite angles.</p> <p>G6.2C Know that angles inside a triangle add up to 180° and angles in a quadrilateral add to 360° and find unknown angles using this knowledge.</p> <p>G6.2D Use the properties of rectangles to find missing lengths.</p> <p>G6.2K Estimate the size of angles.</p> <p>G6.2L Draw accurate triangles using practical equipment, given specific details and using knowledge of the properties of triangles to complete missing angles or lengths.</p>	<p>Express missing number problems algebraically and find pairs of numbers that satisfy equations involving two unknowns; find missing lengths and angles; understand how brackets can be used in calculation problems; use knowledge of the order of operations to carry out calculations involving the four operations, solve addition and subtraction multi-step problems using knowledge of the order of operations.</p>

<p>Year 6 Term 1 Week 4</p>	<p>G5.1F Convert between 12-hour time and 24-hour time. G5.1G Solve problems involving time, including converting between 12-hour and 24-hour time. N5.4B Introduce BIDMAS (order of operations) for +, −, ×, ÷ only. G6.1B Convert between different metric units of measure (answers up to and including 2 decimal places). G6.1C Read and record times in different units. G6.1D Solve problems involving converting between units of time (giving answers as mixed units, not decimals). G6.1E Solve problems involving measure, using all four operations. G6.3D Use knowledge of other operations, including fractions, to convert between miles and kilometres.</p>	<p>Convert between grams and kilograms, millilitres and litres, millimetres and centimetres, centimetres and metres, metres and kilometres, and miles and kilometres; revise reading the 24-hour clock and convert 12-hour times to 24-hour; read and write Roman numerals; find time intervals using the 24-hour clock.</p>
<p>Year 6 Term 1 Week 5</p>	<p>N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form. N6.1E Recognise the place value of each digit in a number with 1 or 2 decimal places and write numbers in expanded form. N6.2A Add and subtract positive integers of any size up to and including 1 000 000 using mental or formal written methods of column addition and subtraction, where appropriate. N6.2B Add and subtract 1 and 2 place decimals, including more than two amounts of money. N6.2C Add more than two amounts of money. N6.2D Estimate the answer to a money calculation. N6.2E Understand when to add and when to subtract and the relationship between addition and subtraction. N6.4A Solve problems in contexts, deciding which of the four operations to use. N6.4B Use inverse operations and estimation to check calculations. N6.4C Sustain a line of enquiry, make and test a hypothesis. N6.4D Look for patterns and write rules; use a systematic approach.</p>	<p>Use mental addition, column subtraction and counting up to solve subtractions of amounts of money and word problems; use mathematical reasoning to investigate.</p>

	<p>N6.5K Add and subtract 0·01, 0·02, 0·03,... 0·09 to and from a number with 2 decimal places.</p> <p>N6.5L Solve missing number, fraction and decimal problems.</p> <p>G6.1A Solve problems involving money calculations, using all four operations, including rounding answers to the nearest integer denomination and interpreting answers with 1 decimal place.</p>	
<p>Year 6 Term 1 Week 6</p>	<p>N6.1C Recognise the place value of each digit in a 6-digit number and write numbers in expanded form.</p> <p>N6.1E Recognise the place value of each digit in a number with 1 or 2 decimal places and write numbers in expanded form.</p> <p>N6.3A Recall multiplication and division facts for multiplication tables up to and including 12×12; identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers within these multiplication tables.</p> <p>N6.3B Recognise square and cube numbers and relate these to a pattern that forms a square or cube.</p> <p>N6.3C Multiply integers up to and including four digits by one or two digit numbers using mental or formal written methods, where appropriate.</p> <p>N6.3D Estimate the answer to a multiplication involving a 1 or 2 place decimal and a whole number.</p> <p>N6.3E Multiply decimals with 1 or 2 decimal places by whole numbers.</p> <p>N6.5K Add and subtract 0·01, 0·02, 0·03,... 0·09 to and from a number with 2 decimal places.</p> <p>N6.5L Solve missing number, fraction and decimal problems.</p> <p>G6.1A Solve problems involving money calculations, using all four operations, including rounding answers to the nearest integer denomination and interpreting answers with 1 decimal place.</p>	<p>Use mental multiplication strategies to multiply by numbers such as 4, 8, 5, 25, 19, 29 and 99; revise using short multiplication to multiply 4-digit numbers by 1-digit numbers and use this to multiply amounts of money; solve word problems involving multiplication including 2-step problems and finding change; use long multiplication to multiply 3-digit and 4-digit numbers by teens numbers.</p>
<p>Year 6 Term 1 Week 7</p>	<p>N4.5F Add fractions with the same denominator (for fractions with denominators up to and including 10) to give a total greater than 1.</p>	<p>Understand negative numbers; calculate small differences between negative numbers and negative and positive numbers; add and subtract</p>

	<p>N5.5G Add a mixed number and a fraction where both have the same denominator; subtract fractions from mixed numbers, where both have the same denominator.</p> <p>N6.1I Order positive and negative numbers and write statements using inequality signs $<$ or $>$.</p> <p>N6.2E Understand when to add and when to subtract and the relationship between addition and subtraction.</p> <p>N6.4B Use inverse operations and estimation to check calculations.</p> <p>N6.5E Compare and order fractions whose denominators are all multiples of the same number (including fractions > 1) and write statements using inequality signs $<$ or $>$.</p>	<p>negative numbers; compare fractions with unlike, but related, denominators; correctly use the terms fraction, denominator and numerator; understand what improper fractions and mixed numbers are and add fractions with the same denominator, writing the answer as a mixed number.</p>
<p>Year 6 Term 1 Week 8</p>	<p>G5.2E Identify, describe and compare simple properties of common 3D solids; sort the shapes accordingly.</p> <p>N6.8A Use formal algebraic notation to express missing number problems.</p> <p>N6.8B Solve problems by using simple formulae.</p> <p>N6.8E Use knowledge of number, including commutativity, to find possible combinations of two variables.</p> <p>N6.8H Be able to substitute values into simple algebraic expressions.</p> <p>G6.1E Solve problems involving measure, using all four operations.</p> <p>G6.1F Find perimeters of regular and irregular polygons by measuring and by calculating.</p> <p>G6.1G Recognise and use the formula for area of a rectangle, triangle and parallelogram.</p> <p>G6.1H Recognise and use the formula for volume of a cuboid.</p> <p>G6.1I Solve perimeter and area problems involving rectangles, squares and triangles.</p> <p>G6.2G Make and recognise simple 3D solids from a net.</p>	<p>Calculate the perimeter, area and volume of shapes, and know their units of measurement; understand that shapes can have the same perimeters but different areas and vice versa; calculate the area of a triangle using the formula $A = \frac{1}{2} b \times h$; find the area of parallelograms using the formula $A = b \times h$; name and describe properties of 3D shapes; systematically find and compare nets for different 3D shapes.</p>
<p>Year 6 Term 1 Week 9</p>	<p>N6.3A Recall multiplication and division facts for multiplication tables up to and including 12×12; identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers within these multiplication tables.</p> <p>N6.3B Recognise square and cube numbers and relate these to a pattern that forms a square or cube.</p> <p>N6.3F Divide numbers up to and including four digits by 1-digit numbers with remainders written as fractions.</p> <p>N6.3I Interpret remainders by rounding, as appropriate for the context.</p>	<p>Use mental strategies to divide by 2, 4, 8, 5, 20 and 25; find non-unit fractions of amounts; use short division to divide 3- and 4-digit numbers by 1-digit numbers, including those which leave a remainder; express a remainder as</p>

	<p>N6.5A Work out unit and non-unit fractions (with denominators up to and including 10) of 3-digit numbers or quantities.</p> <p>N6.5B Identify, name and write equivalent fractions of a given fraction (with denominators up to and including 10).</p> <p>N6.5D Simplify fractions using common factors, be able to write fractions in the same denomination using common multiples.</p> <p>N6.5L Solve missing number, fraction and decimal problems.</p>	<p>a fraction, simplifying where possible.</p>
<p>Year 6 Term 1 Week 10</p>	<p>N6.2D Estimate the answer to a money calculation.</p> <p>N6.3D Estimate the answer to a multiplication involving a 1 or 2 place decimal and a whole number.</p> <p>N6.3E Multiply decimals with 1 or 2 decimal places by whole numbers.</p> <p>N6.5F Add and subtract fractions with different denominators and mixed numbers, simplifying and using equivalent fractions as needed.</p> <p>N6.5L Solve missing number, fraction and decimal problems.</p> <p>N6.6A Recognise the per cent symbol (%), understand that per cent relates to 'number of parts per hundred' and write percentages as a fraction with denominator 100 and as a decimal.</p> <p>N6.6B Identify, name and write common equivalent fractions, including $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{3}{4}$ with denominators 10 and 100; write these as decimals and percentages.</p> <p>N6.6C Recall and use equivalences between $\frac{1}{4}$ and 25% and $\frac{1}{2}$ and 50% to find percentages of quantities.</p> <p>N6.6D Find percentages (multiples of 5% and 10%) of quantities in multiples of 5 and 10 only.</p> <p>N6.6E Solve 1- and 2-step problems in contexts, choosing the appropriate operation, working with numbers and fractions (with denominators up to and including 10, and 100), decimals and simple percentages.</p> <p>N6.7B Calculate percentages to solve problems and use percentages for comparison.</p> <p>G6.1A Solve problems involving money calculations, using all four operations, including rounding answers to the nearest integer denomination and interpreting answers with 1 decimal place.</p>	<p>Add and subtract unit fractions with different denominators including mixed numbers; use mental strategies to find simple percentages of amounts, including money.</p>