

Year 6

Mastery Overview Term by Term



In conjunction with....

TIM HANDLEY
CONSULTANCY · TRAINING · LEADERSHIP
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Based on Materials from...

 **MathsHUBS**
White Rose

Year 6 Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number- Place Value and Number Properties		Number- Addition and Subtraction		Number- Multiplication and Division		Number- Fractions, Decimals and Percentages.			Area and Perimeter		
Spring	Number- Place Value and Number Properties		- Measures- Angles	Number Algebra		Number- Four operations		Number- Ratio		Geometry- Properties of shape		
	Fraction s and Percenta ges	Four Oper atio ns	Gap Fill		SATS	Geometry		Post SATS Project				

Objectives to cover throughout the year.

- Use estimation to check answers to calculations and determine in the context of a problem, an appropriate
- Generate and describe linear number sequences (including with fractions)
- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
- 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 3dp.
- Interpret and construct pie charts and line graphs and use these to solve problems

Term by Term Objectives

Year 6

Year group	6	Term	Autumn
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Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<p><u>Number: Place Value and Number Properties</u></p> <p>Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.</p> <p><i>Round any whole number to a required degree of accuracy.</i></p> <p>Use negative numbers in context, and calculate intervals across zero.</p> <p>Solve number and practical problems that involve all of the above.</p> <p>Identify common factors, common multiples and prime numbers.</p>	<p><u>Number- addition subtraction,</u></p> <p>Add and subtract numbers up to five digits using a written method when appropriate.</p> <p>Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why.</p> <p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p>	<p><u>Number:- multiplication + division</u></p> <p>Multiply multi-digit number up to 4 digits by a 2 digit number using the formal written method of long multiplication when appropriate.</p> <p>Divide numbers up to 4 digits by a 1 digit number using the formal written method of short division, interpreting remainders according to context.</p> <p>Divide numbers up to 4 digits by a 2 digit number using an appropriate written method.</p> <p>Solve problems involving addition, subtraction, multiplication and division.</p>	<p><u>Fractions, Decimals and Percentages</u></p> <p><i>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.</i></p> <p><i>Compare and order fractions, including fractions > 1</i></p> <p>Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions.</p> <p>Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example $x =$]</p> <p>Divide proper fractions by whole numbers [for example $\div 2 =$]</p> <p><i>Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction</i></p> <p>Recall and use equivalences between simple fractions, decimals and percentages.</p> <p>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><u>Measurement- Area and Perimeter and volume.</u></p> <p>Recognise that shapes with the same areas can have different perimeters and vice versa.</p> <p><i>Recognise when it is possible to use formulae for area and volume of shapes.</i></p> <p>Calculate the area of rectangles, parallelograms and triangles using a formula.</p>				

Year group	6	Term	Spring
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Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
<p><u>Number: Place value and number properties.</u></p> <p>Identify the value of each digit in numbers given to three decimal places and multiply numbers by 10, 100 and 1000 giving answers up to 3dp.</p> <p>Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.</p> <p>Solve problems which require answers to be rounded to specified degrees of accuracy.</p> <p>Identify common factors, common multiples and prime numbers.</p>	<p><u>Measures- Angles</u></p> <p>Draw, measure and classify angles, including reflex angles.</p> <p>Know the number of angles in a triangle and quadrilateral and use this to solve missing angle problems.</p> <p>Recognize angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p>	<p><u>Number- Algebra</u></p> <p>Use simple formulae</p> <p>Generate and describe linear number sequences.</p> <p>Express missing number problems algebraically.</p> <p>Find pairs of numbers that satisfy an equation with two unknowns.</p> <p>Enumerate possibilities of combinations of two variables.</p>			<p><u>Number- Four Operations</u></p> <p>Perform mental calculations, including with mixed operations and large numbers.</p> <p>Multiply multi-digit number up to 4 digits by a 2 digit number using the formal written method of long multiplication when appropriate.</p> <p>Divide numbers up to 4 digits by a 1 digit number using the formal written method of short division, interpreting remainders according to context.</p> <p>Use their knowledge of the order of operations to carry out calculations involving the four operations.</p> <p>Solve problems involving addition, subtraction, multiplication and division.</p>		<p><u>Number: ratio</u></p> <p>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts.</p> <p>Solve problems involving similar shapes where the scale factor is known or can be found.</p> <p>Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</p>	<p><u>Geometry- Properties of Shape</u></p> <p>Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.</p> <p>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.</p>	

Term by Term Objectives

Year 6

Year group	6	Term	Summer
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Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
<p><u>Fractions and Percentages</u></p> <p><i>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></p> <p><i>Carry out calculations using all four operations and fractions.</i></p>	<p><u>Four Operations</u></p> <p><i>Solve problems involving addition, subtraction, multiplication and division.</i></p>	<p>SATS GAP FILL</p>		<p>SATS WEEK</p>	<p><u>Geometry- Properties of Shapes</u></p> <p><i>Draw 2D shapes using given dimensions and angles</i></p> <p><i>Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.</i></p> <p><u>Geometry- Position and Direction</u> <i>Describe positions on the full coordinate grid (all four quadrants).</i></p> <p><i>Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</i></p>	<p>Contextual maths project.</p>						