

# YEAR 5: MATHS AUTUMN TERM OBJECTIVES

WEEK														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
<b><u>Number – Place Value</u></b>			<b><u>Number- Addition and Subtraction</u></b>			<b><u>Statistics</u></b>		<b><u>Number – Multiplication and Division</u></b>			<b><u>Perimeter and Area</u></b>			
<p>Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.</p> <p>Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.</p> <p>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.</p> <p>Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000.</p> <p>Solve number problems and practical problems that involve all of the above.</p> <p>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</p>			<p>Add and subtract numbers mentally with increasingly large numbers.</p> <p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).</p> <p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</p> <p>Solve addition and subtraction multi-step problems in contexts deciding which operations and methods to use and why.</p> <p><b>* AP1 will take place during this topic.</b></p>			<p>Solve comparison, sum and difference problems using information presented in a line graph.</p> <p>Complete, read and interpret information in tables including timetables.</p>		<p>Multiply and divide numbers mentally drawing upon known facts.</p> <p>Multiply and divide whole numbers by 10, 100 and 1000.</p> <p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</p> <p>Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for 2 digit numbers.</p> <p>Recognise and use square numbers and cube numbers and the notation for squared (<sup>2</sup>) and cubed (<sup>3</sup>)</p> <p>Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</p> <p>Establish whether a number up to 100 is prime and recall prime numbers up to 19.</p>			<p>Measure and calculate the perimeter of composite rectilinear shapes in cm and m.</p> <p>Calculate and compare the area of rectangles (including squares), and including using standard units, cm<sup>2</sup>, m<sup>2</sup> estimate the area of irregular shapes.</p> <p><b>* AP2 will take place during this topic.</b></p>			<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>CONSOLIDATION/ CATCH UP/ WEAKNESSES</b></p>

# YEAR 5: MATHS SPRING TERM OBJECTIVES

WEEK											
1	2	3	4	5	6	7	8	9	10	11	12
<p style="text-align: center;"><b><u>Number – Multiplication and Division</u></b></p> <p>Multiply and divide numbers mentally drawing upon known facts.</p> <p>Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for 2 digit numbers.</p> <p>Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.</p> <p>Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.</p>			<p style="text-align: center;"><b><u>Number: Fractions</u></b></p> <p>Compare and order fractions whose denominators are multiples of the same number.</p> <p>Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.</p> <p>Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements &gt;1 as a mixed number [for example <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}</math>]</p> <p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</p> <p>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</p> <p>Read and write decimal numbers as fractions [ for example <math>0.71 = \frac{71}{100}</math>]</p> <p>Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</p>					<p style="text-align: center;"><b><u>Number: Decimals and Percentages</u></b></p> <p>Read, write, order and compare numbers with up to three decimal places.</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</p> <p>Round decimals with two decimal places to the nearest whole number and to one decimal place.</p> <p>Solve problems involving number up to three decimal places.</p> <p>Recognise the per cent symbol (%) and 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>Solve problems which require knowing percentage and decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math> and those fractions with a denominator of a multiple of 10 or 25.</p> <p style="background-color: yellow;">* AP3 will take place during this topic.</p>			

# YEAR 5: MATHS SUMMER TERM OBJECTIVES

WEEK													
1	2	3	4	5	6	7	8	9	10	11	12		
<p><b><u>Number: Decimals and Percentages</u></b></p> <p>Solve problems involving number up to three decimal places.</p> <p>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</p> <p>Use all four operations to solve problems involving measure [ for example, length, mass, volume, money] using decimal notation, including scaling.</p>	<p><b><u>Geometry- Properties of Shapes and Angles</u></b></p> <p>Identify 3D shapes, including cubes and other cuboids, from 2D representations.</p> <p>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</p> <p>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p> <p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</p> <p>Draw given angles, and measure them in degrees (°)</p> <p>Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and <math>\frac{1}{2}</math> a turn (total 180°) other multiples of 90°.</p>					<p><b><u>Geometry- Position and Direction</u></b></p> <p>Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.</p>	<p><b><u>Measurement- Volume</u></b></p> <p>Estimate volume [for example using 1cm<sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water].</p> <p>Use all four operations to solve problems involving measure.</p>	<p><b><u>Measurement- Converting Units</u></b></p> <p>Convert between different units of metric measure (for example, km and m; cm and m; cm and mm; g and kg; l and ml).</p> <p>Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.</p> <p>Solve problems involving converting between units of time.</p> <p style="background-color: yellow;">* AP4 will take place during this topic.</p>					<p>CONSOLIDATION/ CATCH UP/ WEAKNESSES</p>

