

Pupil Name:

Year Group: Autumn Score:

Spring Score:

Summer Score

## BLACK END OF YEAR OBJECTIVES (49)

	Number and Place Value	Mastery
	I can read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	
	<b><u>I can round any whole number to a required degree of accuracy</u></b>	
	<b><u>I can use negative numbers in context, and calculate intervals across 0</u></b>	
	I can solve number and practical problems that involve all of the above	
	<b>Addition, Subtraction, Multiplication and Division</b>	
	<b><u>I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using long multiplication</u></b>	
	I can $\div$ numbers up to 4 digits by a 2-digit whole number long $\div$ , and interpret remainders as whole numbers, fractions, or by rounding, as appropriate for the context	
	<b><u>I can divide numbers up to 4 digits by a two-digit number using short division where appropriate, interpreting remainders according to the context</u></b>	
	I can perform mental calculations, including with mixed operations and large numbers	
	I can identify common factors, common multiples, prime numbers (up to 19), square numbers up to 144	
	I use my knowledge of the order of operations to carry out calculations involving the 4 operations	
	<b><u>I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</u></b>	
	I can reason and solve problems involving addition, subtraction, multiplication and division	
	<b><u>I can use estimation to check answers to calculations and determine an appropriate degree of accuracy</u></b>	
	<b>Fractions (including decimals and percentages)</b>	
	I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination	
	I can compare and order fractions, including fractions $>1$	
	I can add and subtract fractions (and decimals) with different denominators and mixed numbers, using the concept of equivalent fractions	
	I can multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $1/4 \times 1/2 = 1/8$ ]	
	I can divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$ ]	
	I can associate a fraction with division and calculate decimal fraction equivalents [for example, $0.375 = 3/8$ ]	
	I can identify the value of each digit in numbers given to 3 decimal places and multiply and divide numbers by 10, 100 and 1,000 giving answers up to 3 decimal places	
	I can multiply one-digit numbers with up to 2 decimal places by whole numbers	
	<b><u>I can use written division methods in cases where the answer has up to 2 decimal places</u></b>	
	<b><u>I can recall and use equivalences between simple fractions, decimals and percentages in different contexts</u></b>	
	I can solve problems which need answers to be rounded to a requested number of decimal places.	
	<b>Ratio and Proportion</b>	
	I can solve problems involving the relative sizes of 2 quantities and where there are missing values	
	<b><u>I can reason and solve problems where I calculate and compare percentages/fractions of quantities [e.g. 15% of 360 compared to 20% of 300]</u></b>	
	I can solve problems involving similar shapes where the scale factor is known or can be found	
	<b><u>I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples (e.g 3/5 of the class are boys)</u></b>	
	<b>Algebra</b>	
	<b><u>I can use simple formulae</u></b>	
	I can generate and describe linear number sequences	
	I can express missing number problems algebraically	
	I can find pairs of numbers that satisfy an equation with 2 unknowns	
	I can find possibilities of combinations of 2 variables e.g. $a + b = 20$	
	<b>Measurement: TEACHERS MUST TRACK BACK TO COVERAGE AT Y4 and Y5 e.g. time, roman numerals, duration, perimeter/area</b>	
	I can reason and solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate	
	<b><u>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 3 decimal places</u></b>	
	I can convert between miles and kilometres	
	I can recognise that shapes with the same areas can have different perimeters and vice versa	
	I can recognise when it is possible to use formulae for area and volume of shapes	
	I can calculate the area of parallelograms and triangles	
	I can calculate, estimate and compare volume of cubes and cuboids using $\text{cm}^3$ and $\text{m}^3$ , and extending $\text{mm}^3$ and $\text{km}^3$	
	<b>Properties of Shape, position and direction</b>	
	I can draw 2-D shapes using given dimensions and angles	
	I can recognise, describe and build simple 3-D shapes, including making nets	
	<b><u>I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons</u></b>	
	I can illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius	
	I can recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles	
	I can describe positions on the full coordinate grid (all 4 quadrants)	
	<b><u>I can use reasoning to solve problems related to co-ordinates, reflections and translations. I can draw and translate simple shapes on the coordinate plane, and reflect them in the axes</u></b>	
	<b>Statistics</b>	
	<b><u>I can interpret and construct pie charts and line graphs and use these to solve problems</u></b>	
	<b><u>I can calculate and interpret the mean as an average</u></b>	