Pupil Name: **Year Group:** **Autumn Score:** **Spring Score:** **Summer Score:**

Emerging at elements of National Standard	Developing within the National Standard	Secure at the National Standard	Mastery
15-25%(5-8) of objectives secure 3E 9-16 objectives secure then 3E+	50% (17-21) of objectives secure, 12 of which are number. 22-24 objectives 3D+	75% of objectives secure 25-30 objectives, 18 of which are number. All KPIs achieved.	95% (31) of objectives are secure. Many aspects are embedded and rapid. There is consistent ability to apply in range of contexts at depth with high level reasoning.
3E/3E+	**3D/3D+**	**3S**	**3S+**

	Number and Place Value	**Greater Depth**
	I can count forwards and backwards in multiples of 2, 3, 5, 10, 20, 4, 8, 50 and 100;	
	I can recognise the place value of each digit in a 3-digit number (100s, 10s, 1s) and recognise 1,000	
	find 10 or 100 more or less than a given number	
	I can read, write, compare and order numbers up to 1,000	
	I can round to the nearest 10 or 100	
	I can explore making numbers with the roman numerals I, x and v	
	I can solve number problems and practical problems involving these ideas	
	Addition and Subtraction	
	I can add and subtract numbers mentally up to 1000, including: • **a three-digit number and 1s a three-digit number and 10s a three-digit number and 100s**	
	I can add and subtract using the column methods for up to three-digit numbers e.g. HTU + HTU, HTU – TU	
	I can use rounding/estimating to check answers to calculations	
	I can solve problems, using number facts, place value, and more complex addition and subtraction	
	I can use inverse operations to solve missing number calculations	
	Multiplication and Division	
	I can recall and use multiplication and division facts for the 2, 5, 10, 3, 4 and 8 multiplication tables	
	I can multiply and divide a whole number by ten (some children will be able to do this to one decimal place)	
	I recognise commutivity and the inverse (3 x 4 = 12 and 12 ÷ 4 = 3 and that 30 x 4 = 3 x 4 x 10	
	I can use my place value and times tables facts to multiply and divide mentally eg 20 x 3 = 60 ÷ 3 =	
	I can write and calculate number sentences for multiplication for 2 digit numbers by one digit number using known facts.	
	I can solve division calculations using hops on a number line, jottings counting up or mental methods to divide a two-digit number by a one digit number, including calculations with remainders.	
	I can begin to use the vocabulary multiples and factors	
	I can solve a variety of problems with the skills above, including: • partitioning • scaling problems (e.g. 4 times as high/8 times as long) • correspondence problems in which n objects are connected to m objects • function machines • balancing sums	
	Fractions	
	I understand the place value of tenths, can count up and down in tenths and understand that tenths are made by divide a whole by ten.	
	I can recognise, find and write fractions (including non-unit) of a set of objects, shape or number line : e.g. 1/3, 2/5 etc (small denominators)	
	I can recognise and show, using diagrams, equivalent fractions with small denominators	
	I can calculate a unit fraction of a whole number eg 1/3 or 12, ¼ of 20, 1/5 of 20	
	I can add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]	
	I can compare and order unit fractions, and fractions with the same denominators	
	I can solve problems that involve all of the above	
	Measurement	
	I can practically measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	
	I can add and subtract amounts of money to give change, using both £ and p practically	
	I can estimate, tell and write the time from an analogue clock to the nearest minute, including using Roman numerals from I to XII, **and 12-hour and 24-hour clocks**	
	I can practically record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight	
	I know the number of seconds in a minute and the number of days in each month, year and leap year	
	I can compare durations of events [for example, to calculate the time taken by particular events or tasks]	
	I can measure the perimeter of simple 2-D shapes	
	Properties of Shape	
	I can draw 2-D shapes and make 3-D shapes using modelling materials; I can recognise 3-D shapes in different orientations and describe them	
	I can recognise angles as a property of shape or a description of a turn	
	I can identify right angles and recognise that 2 right angles make a 1/2 turn; 3 make ¾ of a turn and 4 make a complete turn. I can also identify whether angles are >< than a right angle. (acute and obtuse)	
	I can identify horizontal and vertical lines and pairs of perpendicular and parallel lines	
	Statistics	
	I can interpret and present data using bar charts, pictograms and tables within a range of contexts.	
	I can solve one step and two step questions (e.g. How many more? How many less?) using information in scaled bar charts, pictograms and tables. (extend to comparison, sum and difference)	

Pupil Name: **Year Group:** **Autumn Score:** **Spring Score:** **Summer Score:**

Emerging at elements of National Standard	Developing within the National Standard	Secure at the National Standard	Mastery
15-25% (6-11) of objectives secure then 4E 12-21 objectives secure then 4E+	50% (22-27) of objectives secure, 15 of which are number. 28-30 objectives secure then 4D+	75% of objectives secure (31-39) objectives, 24 of which are number. All KPIs achieved.	95% (40) of objectives are secure. Many aspects are embedded and rapid. There is consistent ability to apply in range of contexts at depth with high level reasoning.
4E/4E+	**4D/4D+**	**4S**	**4S+**

		GD
	Number and Place Value	
	I can count forwards and backwards in multiples of 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 20, 25, 50, 100 and 1,000.	
	I can find 10, 100 and 1,000 more or less than a given number up to 10,000.	
	I can count backwards through 0 to include negative numbers to -20 using a range of scales.	
	I can recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s) and recognise 10,000.	
	I can read, write, order and compare numbers up to 10,000.	
	I can round any number to the nearest 10, 100 or 1,000.	
	I can solve number and practical problems that involve all of the above.	
	I can read Roman numerals to 100 (I to C) and know that the numeral system changed to include 0 and place value.	
	Addition and Subtraction	
	I can add and subtract numbers with up to 4 digit, using the column addition and subtraction where appropriate.	
	I can add and subtract numbers mentally up to 10,000, including: • a given number and multiples of 1 a given number and multiples of 10 a given number and multiples of 100 • a given number and multiples of 1000	
	I can use rounding/estimating to check answers to calculations.	
	I can use the inverse operation to solve missing number calculations.	
	I can solve two-step addition & subtraction problems, deciding which operations and methods to use and why.	
	Multiplication and Division	
	I know my multiplication and division facts for the 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 times tables.	
	I can use my place value and times table facts to multiply and divide mentally (e.g. 720 ÷ 9 = 80 derived from 9 x 8 = 72).	
	I can multiply and divide a whole number by 10 and 100, including an answer to 1 or 2 decimal places.	
	I can identify a multiples of numbers and factors of numbers.	
	I can recognise and use factor pairs and their commutativity mentally (e.g. 18 x 6 = 2 x 9 x 6 = 18 x 3 x 2).	
	I can multiply two-digit and three-digit numbers by a one-digit number using formal written layout.	
	I can divide a 3-digit number by a one digit number using a formal written method, including remainders.	
	I can solve problems involving multiplying and adding, including: • Partitioning to multiply two-digit numbers by 1 digit • Scaling problems (e.g. 4 times as high/8 times as long) • Correspondence problems such as n objects are connected to m objects and introduce ratio/relative sizes of 2 quantities. (e.g. 3 scoops of red paint to 1 scoop of white paint, if I had 6 scoops of red paint. How much white paint do I need? I need to make 16 scoops of pink paint. How much red and white do I need?) • Function machines and balancing calculations (3 x 4 = 2 x 6)	
	Fractions	
	I can recognise and show, using diagrams and number lines, families of common equivalent fractions	
	I understand, read and write the place value of tenths and hundredths, can count up and down in tenths and hundredths and understand that: • **Tenths are made by dividing a whole 10.** • **Hundredths are made by dividing a whole by 100 or a tenth by 10.**	
	I can solve problems using harder fractions (incl. non-unit fractions) to calculate quantities e.g. 3/8 of £24	
	I can add and subtract fractions with the same denominator beyond a whole and show my answer as an improper fraction.	
	I can recognise and write decimal equivalents for tenths and hundredths.	
	I can recognise and write decimal equivalents to 1/4, 1/2, 3/4	
	I can round decimals with 1 decimal place to the nearest whole number	
	I can compare numbers with the same number of decimal places up to 2 decimal places **I can solve simple measure and money problems involving fractions and decimals to 2 decimal places**	
	Measurement	
	I can practically measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) money (£/p)	
	I can convert between different units of measure [for example, cm to m, hour to minute mm to cm, £/p]	
	I can measure and calculate the perimeter of a rectangular object (including squares) in centimetres and metres	
	I can find the area of rectangular shapes by counting squares	
	I can estimate, compare and calculate different measures, including money in pounds and pence	
	I can read, write and convert time between analogue and digital 12- and 24-hour clocks	
	I can solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days	
	Properties of Shape	
	I can compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	
	I can identify acute and obtuse angles and compare and order angles up to 2 right angles by size	
	I can identify lines of symmetry in 2-D shapes presented in different orientations	
	I can complete a simple symmetrical drawing across a line of symmetry	
	I can identify and describe the properties of a range of 3D shapes (pyramids, prisms, cuboids, cubes, cones)	
	Position and Direction	
	I can describe positions on a 2-D grid as coordinates in the first quadrant	
	I can describe movements between positions as translations to the left/right and up/down	
	I can plot specified points and draw sides to complete a given polygon on a quadrant	
	Statistics	
	I can interpret and present using a range of graphical methods with more complex scales, including bar charts and time graphs (discrete and continuous data)	
	I can solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs	

Pupil Name: **Year Group:** **Autumn Score:** **Spring Score:** **Summer Score:**

Emerging at elements of National Standard	Developing within the National Standard	Working at the National Standard	Mastery
15-25% (7-12) of objectives secure then 5E. 13-24 objectives secure then 5E+	50% (25-33) of objectives secure, 17 of which are number. 34-36 then 5D+	75% of objectives secure 37-45 objectives, 28 of which are number. All KPIs achieved.	95% (46) of objectives are secure. Many aspects are embedded and rapid. There is consistent ability to apply in range of contexts at depth with high level reasoning.
5E/5E+	**5D/5D+**	**5S**	**5S+**

		GD
	Number and Place Value	
	I can read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit	
	I can count forwards or backwards in multiples 2 – 12, 10, 20 (200), 25 (250), 50 (500), 100, 1000, 10,000, 100,000 for any given number up to 1,000,000	
	I understand negative numbers and can count forwards and backwards through 0 using a variety of scales.	
	I can round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000, 100,000	
	I can solve number problems and practical problems that involve all of the above	
	I can read Roman numerals to 1,000 (M) and recognise years written in Roman numerals	
	Addition and Subtraction	
	I can use the column method to add and subtract whole numbers with more than 4 digits.	
	I can add and subtract numbers mentally with increasingly large numbers (e.g. add/take mentally multiples of 10/100/1000)	
	I can use rounding/estimating to check answers to calculations	
	I can use the inverse operation to solve missing number calculations	
	I can solve addition and subtraction multi-step problems, deciding which operations and methods to use and why	
	Multiplication and Division	
	I can identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers	
	I recall prime numbers up to 19 and begin to establish whether a number up to 100 is a prime number. I know and use the vocabulary of prime numbers and prime factors	
	I can multiply numbers up to 4 digits by a 1- or 2-digit number using a formal written method, including long multiplication for two-digit numbers	
	I can multiply and divide numbers mentally, drawing upon known facts e.g. times tables and place value (35 x ? = 3500)	
	I can ÷ numbers up to 4 digits by a 1-digit number using the formal written method of short division and interpret remainders for the context	
	I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000	
	I can recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})	
	I can solve problems involving x and ÷, including using knowledge of factors and multiples, squares and cubes	
	I can solve problems involving equivalent statements (balancing calculations)	
	I can solve problems involving x and ÷, including scaling by simple fractions and problems involving simple ratios	
	Fractions	
	I can compare and order fractions whose denominators are all multiples of the same number	
	I can identify, name and write equivalent fractions, including tenths and hundredths	
	I can recognise mixed numbers and improper fractions and convert from one form to the other [e.g 2/5 + 4/5 = 6/5 = 1 1/5]	
	I can add and subtract fractions with the same denominator, and denominators that are multiples of the same number	
	I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
	I can read and write decimal numbers as fractions [for example, 0.71 = 71/100] I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	
	I can round decimals with 2 decimal places to the nearest whole number and to 1 decimal place	
	I can read, write, order and compare numbers with up to 3 decimal places	
	I can solve problems involving number up to 3 decimal places	
	I can recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal fraction	
	I can solve problems which require knowing percentage and decimal equivalents (1/2, 1/4, ¾, 1/5, 2/5, 4/5) and calculates fractions of a whole number.	
	Measurement	
	I can convert between different units of metric measure [for example, km/m; cm/m; cm/mm; g/kg; l/ml] **I can measure and calculate the perimeter of composite rectangular shapes in centimetres and metres** **I can calculate and compare the area of rectangles (including squares) using cm² and m² and estimate the area of irregular shapes**	
	I can estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity [for example, using water]	
	I can solve problems involving converting between units of time	
	I can use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, incl. scaling	
	Properties of Shape	
	I can identify, compare and describe a range of 2D shapes (triangles, quadrilaterals) including understanding symmetry, angles, side length, parallel and perpendicular	
	I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles **I can draw given angles, and measure them in degrees (°)**	
	I can identify: angles at a point and 1 whole turn (total 360°): angles at a point on a straight line and half a turn (total 180°): other multiples of 90° I can use the properties of rectangles to deduce related facts and find missing lengths and angles **I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles**	
	Position and Direction	
	I can 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.	
	Statistics	
	I can complete, read and interpret information in tables, including timetables	
	I can solve comparison, sum and difference problems using information presented in a line graph	

Pupil Name: **Year Group:** **Autumn Score:** **Spring Score:** **Summer Score:**

YEAR 6/BLACK END OF YEAR OBJECTIVES (49)

Emerging at elements of National Standard	Developing within the National Standard	Secure at the National Standard	Mastery
15-25% (7-12) of objectives secure then 6E. 13-24 objectives secure then 6E+	50% (24-33) of objectives secure, 17 of which are number. 34-35 objectives secure then 6D+	75% of objectives secure 37-45 objectives, 28 of which are number. All KPIs achieved.	95% (46) of objectives are secure. Many aspects are embedded and rapid. There is consistent ability to apply in range of contexts at depth with high level reasoning.
6E/6E+	**6D/6D+**	**6S** (beware of addition measure)	**6S+**

	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	
	I can round any whole number to a required degree of accuracy	
	I can use negative numbers in context, and calculate intervals across 0	
	I can solve number and practical problems that involve all of the above	
	Addition, Subtraction, Multiplication and Division	
	I can multiply multi-digit numbers up to 4 digits by a two-digit whole number using long multiplication	
	I can ÷ numbers up to 4 digits by a 2-digit whole number long ÷, and interpret remainders as whole numbers, fractions, or by rounding, as appropriate for the context	
	I can divide numbers up to 4 digits by a two-digit number using short division where appropriate, interpreting remainders according to the context	
	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	
	I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	
	I can reason and solve problems involving addition, subtraction, multiplication and division	
	I can use estimation to check answers to calculations and determine an appropriate degree of accuracy	
	Fractions (including decimals and percentages)	
	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 × 1/2 = 1/8]	
	I can divide proper fractions by whole numbers [for example, 1/3 ÷ 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	
	I can use written division methods in cases where the answer has up to 2 decimal places	
	I can recall and use equivalences between simple fractions, decimals and percentages in different contexts	
	I can solve problems which need answers to be rounded to a requested number of decimal places.	
	Ratio and Proportion	
	I can solve problems involving the relative sizes of 2 quantities and where there are missing values	
	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]	
	I can solve problems involving similar shapes where the scale factor is known or can be found	
	I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples (e.g 3/5 of the class are boys)	
	Algebra **I can use simple formulae**	
	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	
	Measurement: TEACHERS MUST TRACK BACK TO COVERAGE AT Y4 and Y5 e.g. time, roman numerals, duration, perimeter/area	
	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	
	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	
	I can convert between miles and kilometres and other imperial measures e.g. pints, inches, pounds	
	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 cm^3 and m^3, and extending mm^3 and km^3	
	Properties of Shape, position and direction	
	I can draw 2-D shapes using given dimensions and angles	
	I can recognise, describe and build simple 3-D shapes, including making nets	
	I can compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	
	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) **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**	
	Statistics	
	I can interpret and construct pie charts and line graphs and use these to solve problems	
	I can calculate and interpret the mean as an average	