Mathematics Expectations Pupil's Name: _____

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	EXPECTATIONS	SEEN	SECURE
	Number – Number and place value		
1	I can read and write numbers up to 10,000,000.		
2	I can order and compare numbers up to 10,000,000.		
3	I can determine the value of each digit in numbers up to 10,000,000.		
4	I can round any whole number to a required degree of accuracy.		
5	I can use negative numbers in context, and calculate intervals across zero.		
6	I can solve number problems and practical problems that involve rounding, negative numbers, ordering and comparing values up to 10,000,000.		
	Number – addition and subtraction		
7	I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.		
	Number – multiplication and division		
8	I can identify common factors, common multiples and prime numbers.		
9	I can multiply multi-digit numbers up to 4 digits by a 2 digit whole number using the formal written method of long multiplication.		
10	I can divide numbers up to 4 digits by a 2 digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.		
11	I can divide numbers up to 4 digits by a 2 digit number using the formal written method of short division where appropriate.		
12	I can perform mental calculations, including with mixed operations and large numbers.		
13	I can solve problems involving addition, subtraction, multiplication and division.		
14	I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.		
15	I can use my knowledge of the order of operations to carry out calculations involving the four operations (BODMAS).		
	Number - Fractions (including decimals and percentages)		
16	I can use common factors to simplify fractions.		
17	I can use common multiples to express fractions in the same denomination.		
18	I can compare and order fractions, including fractions >1.		
19	I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.		

20	I can multiply simple pairs of proper fractions		
21	I can multiply simple pairs of proper fractions, writing the answer in the simplest form e.g. $\frac{1}{4} \times \frac{1}{2} = 1/8$.		
22	I can divide proper fractions by whole numbers e.g. 1/3 ÷ 2 = 1/6.		
23	I can associate a fraction with division to calculate decimal fractions equivalents (0.375) for a simple fraction (3/8).		
24	I can identify the value of each digit to 3 decimal places.		
25	I can multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places (linked to measurement).		
26	I can multiply 1-digit numbers with up to 2 decimal places by whole numbers.		
27	I can use written division methods in cases where the answer has up to 2 decimal places.		
28	I can solve problems which require answers to be rounded to specified degrees of accuracy.		

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	EXPECTATIONS	SEEN	SECURE
29	I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.		
	Ratio and proportion		
30	I can solve problems involving the relative sizes of two quantities, where missing values can be found using multiplication and division facts (e.g. recipes and size of shapes)		
31	I can solve problems involving the calculation of percentages and the use of percentage comparisons (e.g. 15% of 360).		
32	I can solve problems involving similar shapes where the scale factor is known or can be found.		
33	I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples (e.g. Emma gets 2/3 of £150. Erica gets 1/3. How much does Erica have?)		
	Algebra		
34	I can express missing number problems algebraically.		
35	I can use simple formulae.		
36	I can generate and describe linear number sequences.		
37	I can find pairs of numbers that satisfy an equation with two unknowns.		
38	I can enumerate possibilities of combinations of two variables (e.g. if m is between 0-10 and n is between 10-15, what could m + n=?).		
	Measurement		

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39	I can use, read, write and convert between standard units, converting measurements		
	Statistics		
61	I can interpret and construct line graphs.		
40	I can convert between miles and kilometres.		
62	I can interpret pie charts.		
41	I recognise that shapes with the same areas can have different perimeters and vice versa.		
63	I can estimate values on pie charts (using tracing paper/protractors as an aid)		
64	I can construct pie charts.		
42	I can calculate the area of parallelograms and triangles.		
65	I can solve problems using pie charts and line graphs (including % and numbers)		
43	I recognise when it is possible to use the formulae for the area of shapes.		
66	I can calculate and interpret the mean as an average.		
44	I can calculate, estimate and compare volume of cubes and cuboids, using standard units.		
45	I recognise when it is possible to use the formulae for the volume of shapes.		
46	I can solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 decimal places where appropriate.		
	Geometry – properties of shapes		
47	I can compare and classify geometric shapes based on the properties and sizes.		
48	I can draw 2D shapes given dimensions and angles.		
49	I can describe simple 3D shapes.		
50	I recognise and build simple 3D shapes, including making nets.		
51	I can find unknown angles in any triangles.		
52	I can find unknown angles in quadrilaterals.		
53	I can find unknown angles in regular polygons.		
54	I recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.		
55	I can illustrate and name parts of circles, including radius, diameter and circumference.		
56	I know the diameter is twice the radius.		
	Geometry – position and direction		
57	I can describe positions on the full co-ordinate grid (all four quadrants).		
58	I can draw and translate simple shapes on the co-ordinate plane.		
59	I can reflect shapes in the axes.		

Exceeding Year 6 Expectations

	EXPECTATIONS	SEEN	SECURE
67	I can compare, order and convert between fractions, decimals and percentages, for example, in contexts related to science, history or geography learning		

68	I can move beyond squared and cubed numbers to calculate problems such as $X \times 10^n$ where n is positive.		
69	I can use =, ≠, <, >, ≤, ≥ correctly.		
70	I can multiply all integers, (using efficient written methods) including mixed numbers and negative numbers.		
71	I can recognise an arithmetic progression and find the n*th* term.		
72	I can use a formula for measuring the area of a shape, such as a rectangle and triangle to work out the area of an irregular shape in the school environment		
73	I can use the four operations with mass, length, time, money and other measures, including the use of decimal quantities.		
74	I can create a scaled model of an historical or geographical structure showing an acceptable degree of accuracy using known measurements.		
75	I can calculate the costs and time involved of a visit to a destination in another part of the world relating to on-going learning in history or geography.		
76	I can collect my own data on a personal project and present information in formats of my choosing, using charts, graphs and tables, and answer specific questions related to my research.		