YEAR 6 MATHS TARGETS **Name:**

TARGETS			
Number, place value, approximation and estimation/rounding			
1. I can read, write, order and compare numbers up to 10,000,000.			
2. I can determine the value of each digit in numbers up to 10,000,000.			
3. I can round any whole number to a required degree of accuracy.			
4. I can use negative numbers in context, and calculate intervals across zero.			
5. I can solve number problems and practical problems with the above.			
Calculations			
6. I can use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.			
7. I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.			
8. I can identify common factors, common multiples and prime numbers.			
9. I can perform mental calculations, including with mixed operations and large numbers.			
10. I can multiply multi-digit numbers up to 4 digits by a 2 digit whole number using the formal written method of long multiplication.			
11. 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.			
12. I can divide numbers up to 4 digits by a 2 digit number using the formal written method of short division where appropriate.			
13. I can solve problems involving addition, subtraction, multiplication and division.			
14. I can use my knowledge of the order of operations to carry out calculations involving the four operations.			

Fractions, decimals and percentages			
15. I can use common factors to simplify fractions and use common multiples to express fractions in the same denomination.			
16. I can compare and order fractions, including fractions >1.			
17. I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.			
18. I can multiply simple pairs of proper fractions, writing the answer in the simplest form.			
19. I can divide proper fractions by whole numbers.			
20. I can associate a fraction with division to calculate decimal fractions equivalents for a simple fraction.			
21. I can identify the value of each digit to 3 decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places.			
22. I can multiply 1-digit numbers with up to 2 decimal places by whole numbers.			
23. I can use written division methods in cases where the answer has up to 2 decimal places.			
24. I can solve problems which require answers to be rounded to specified degrees of accuracy.			

25. I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts			
Ratio and proportion			
26. I can solve problems involving the relative sizes of two quantities, where missing values can be found using integer multiplication and division facts.			
27. I can solve problems involving the calculation of percentages and the use of percentage comparisons.			
28. can solve problems involving similar shapes where the scale factor is known or can be found.			
29. I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.			
Algebra			
30. I can express missing number problems algebraically.			
31. I can use simple formulae.			
32. I can generate and describe linear number sequences.			
33. I can find pairs of numbers that satisfy an equation with two unknowns.			
34. I can enumerate possibilities of combinations of two variables.			

Measurement			
35. 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 of up to 3 decimal places.			
36. I can convert between miles and kilometres.			
37. I recognise that shapes with the same areas can have different perimeters and vice versa.			
38. I can calculate the area of parallelograms and triangles.			
39. I recognise when it is possible to use the formulae for the area of shapes.			
40. I can calculate, estimate and compare volume of cubes and cuboids, using standard units.			
41. I recognise when it is possible to use the formulae for the volume of shapes.			
42. 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			
43. I can compare and classify geometric shapes based on the properties and sizes.			
44. I can describe simple 3D shapes.			
45. I can draw 2D shapes given dimensions and angles.			
46. I recognise and build simple 3D shapes, including making nets.			
47. I can find unknown angles in any triangles, quadrilaterals and regular polygons.			
48. I recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.			
49. I can illustrate and name parts of circles, including radius, diameter and			

circumference.			
50. I know the diameter is twice the radius.			
Geometry – position and direction			
51. I can draw and translate simple shapes on the co-ordinate plane, and reflect them in the axes.			
52. I can describe positions on the full co-ordinate grid (all four quadrants).			
Statistics			
53. I can interpret and construct pie charts and line graphs and use these to solve problems			
54. I can calculate and interpret the mean as an average.			

Exceeding

1. I can compare, order and convert between fractions, decimals and percentages, for example, in contexts related to science, history or geography learning			
2. I can move beyond squared and cubed numbers to calculate problems such as $X \times 10^n$ where n is positive.			
3. I can use $=$, $\neq$, $<$, $>$, $\leq$, $\geq$ correctly.			
4. I can multiply all integers, (using efficient written methods) including mixed numbers and negative numbers.			
5. I can recognise an arithmetic progression and find the n*th* term .			
6. 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			
7. I can use the four operations with mass, length, time, money and other measures, including the use of decimal quantities.			
8. I can create a scaled model of an historical or geographical structure showing an acceptable degree of accuracy using known measurements.			
9. 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.			
10. 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.			