

Grendon Primary School Curriculum Overview
Medium Term Planning - Maths
Year 6

	Autumn	Spring	Summer
Number: Number and Place Value			
1. Read, Write, order and compare numbers up to 10,000,000 and determine the value of each digit			
2. Round any whole number to a required degree of accuracy			
3. Use negative numbers in context and calculate intervals across zero			
4. Solve number and practical problems that involve number and place value			

Number: Addition, Subtraction, Multiplication and Division			
5. Multiply multi-digit numbers up to 4-digits by a 2-digit whole number using the formal written method of long multiplication			
6. Divide numbers up to 4 digits by a 2-digit whole number using the formal written method of division and interpret remainders as whole number remainders, fractions or by rounding			
7. Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division, interpreting remainders			
8. Perform mental calculations, including mixed operations and large numbers			
9. Identify common factors, common multiples and prime numbers			
10. Use knowledge of the order of operations to carry out calculations involving the four operations			
11. Solve addition and subtraction multi-step problems in contexts, deciding which operation and methods to use and why			
12. Solve problems involving addition, subtraction, multiplication and division			
13. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy			

Number: Fractions, (including decimals)			
14. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination			
15. Compare and order fractions, including fractions > 1			
16. Add and subtract fractions with different denominators and mixed numbers using the concept of equivalent fractions			
17. Multiply simple pairs of proper fractions, writing the answer in its simplest form			
18. Divide proper fractions by whole numbers			
19. Associate a fraction with division and calculate decimal fraction equivalents for a simple fraction			
20. Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places			
21. Multiply one-digit numbers with up to 2 decimal places by whole numbers			

22. Use written division methods in cases where the answer has up to two decimal places			
23. Solve problems which require answers to be rounded to specified degrees of accuracy			
24. Recall and use equivalences between simple fractions, decimals and percentages, including different contexts			

Ratio and Proportion			
25. Solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts			
26. Solve problems involving the calculation of percentages and the use of percentages for comparison			
27. Solve problems involving similar shapes where the scale factor is known or can be found			
28. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples			

Algebra			
29. Use simple formulae			
30. Generate and describe linear number sequences			
31. Express missing numbers algebraically			
32. Find pairs of numbers that satisfy an equation with 2 unknowns			
33. Enumerate possibilities of combinations of two variables			

Measurement			
34. Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places			
35. Use, read, write and convert between standard units, converting measurements of length, volume, mass and time using decimal notation up to 3 decimal places			
36. Convert between miles and kilometres			
37. Recognise that shapes with the same areas can have different perimeters and vice versa			
38. Recognise when it is possible to use a formulae for area and volume of shapes			
39. Calculate the area of parallelograms and triangles			
40. Calculate, estimate and compare volume of cubes and cuboids using standard units and extending to other units			

Geometry: Properties of Shapes			
41. Draw 2D shapes using given dimensions and angles			
42. Recognise, describe and build simple 3D shapes based on their properties and sizes and find unknown angles in any triangle, quadrilateral and regular polygon			
43. Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius			
44. Recognise angles where they meet at a point, are on a straight line or are vertically opposite, finding missing angles			

Geometry: Position and Direction

45. Describe positions on the full coordinate grid			
46. Draw and translate simple shapes on the coordinate plane and reflect them in the axes			

Statistics

47. Interpret and construct pie charts and line graphs and use these to solve problems			
48. Calculate and interpret the mean as an average			