St Peter's CE (VA) Primary School

Year 6 Long Term Maths Plan – Mastery Curriculum

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15
Autumn		**N1** Number: Place value		**N2** Number: Addition and Subtraction, Multiplication and Division					**N3** Number: Fractions				**G1** Geometry: Position & Direction		
Spring	**N4** Number: Decimals		**N5** Percentages		**N6** Algebra		**M1** Measurement: Converting Units	**M2** Measurement: Perimeter, Area and Volume		**N7** Number: Ratio		Consolidation			
Summer	**S1** Statistics		**G2** Geometry: Properties of Shape			Consolidation and themed projects									

Adapted from White Rose maths

Year 6										
N1	Number: Place Value (2wks)	**A** read, write, order and compare numbers up to 10,000,000 and determine the value of each digit	**B** round any whole number to a required degree of accuracy	**C** use negative numbers in context, and calculate intervals across 0	**D** solve number and practical problems that involve all of the above					
N2	Number: Addition and subtraction Multiplication and Division (4wks)	**A** multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication	**B** divide numbers up to 4 digits by a two-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	**C** divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context	**D** perform mental calculations, including with mixed operations and large numbers	**E** identify common factors, common multiples and prime numbers	**F** use their knowledge of the order of operations to carry out calculations involving the 4 operations	**G** solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	**H** solve problems involving addition, subtraction, multiplication and division	**I** use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy
N3	Number: Fractions (4wks)	**A** use common factors to simplify fractions; use common multiples to express fractions in the same denomination	**B** compare and order fractions, including fractions >1	**C** add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	**D** multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]	**E** divide proper fractions by whole numbers [for example, $\frac{1}{3} \div 2 = \frac{1}{6}$]	**F** associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, $\frac{3}{8}$]	**G** solve fraction and practical problems that involve all of the above		

N4	Number: Decimals (2wks)	**A** 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	**B** multiply one-digit numbers with up to 2 decimal places by whole numbers	**C** use written division methods in cases where the answer has up to 2 decimal places	**D** solve problems which require answers to be rounded to specified degrees of accuracy	
N5	Number: Percentages (2wks)	**A** recall and use equivalences between simple fractions, decimals and percentages, including in different contexts		**B** solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison		
N6	Number: Algebra (2wks)	**A** use simple formulae	**B** generate and describe linear number sequences	**C** express missing number problems algebraically	**D** find pairs of numbers that satisfy an equation with 2 unknowns	**E** enumerate possibilities of combinations of 2 variables
N7	Number: Ratio (2wks)	**A** solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts	**B** solve problems involving the calculation of percentages [for example, of measures and such as 15% of 360] and the use of percentages for comparison	**C** solve problems involving similar shapes where the scale factor is known or can be found	**D** solve problems involving unequal sharing and grouping using knowledge of fractions and multiples	
G1	Geometry: Position and Direction (1wks)	**A** describe positions on the full coordinate grid (all 4 quadrants)		**B** draw and translate simple shapes on the coordinate plane, and reflect them in the axes		
G2	Geometry: Properties of Shape (2wks)	**A** draw 2-D shapes using given dimensions and angles	**B** recognise, describe and build simple 3-D shapes, including making nets	**C** compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons	**D** illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius	**E** recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles
M1	Measurement: Converting units (1wks)	**A** solve problems involving the calculation and conversion of units of measure, using	**B** use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a	**C** convert between miles and kilometres		

		decimal notation up to 3 decimal places where appropriate		smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 decimal places	
M2	Measurement: Area, Perimeter & volume (2wks)	**A** recognise that shapes with the same areas can have different perimeters and vice versa	**B** recognise when it is possible to use formulae for area and volume of shapes	**C** calculate the area of parallelograms and triangles	**D** calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units [for example, mm^3 and km^3]
S1	Statistics (2wks)	**A** interpret and construct pie charts and line graphs and use these to solve problems		**B** calculate and interpret the mean as an average	