Maths Unit Overview – Year 6

Autumn 1:

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Place Value		Addition/subtraction	Multiplication/division		Fractions/decimals/percentage		
SMALL STEPS • To be able to partition numbers to a million • To be able to partition numbers to ten million • To read and write numbers to 10,000,000 • To increase and decrease numbers by a factor of 10. • To label, identify and mark a number line with numbers up to 10,000,000. • To be able to compare and order any numbers • To be able to round any integer to the nearest required power of 10 • To apply understanding of negative numbers in different contexts • Use knowledge of place value to partition decimal numbers and to add or subtract a tenth, three hundredths etc to or from them • To compare and order decimal numbers • To round numbers with up to 3dp to the nearest integer, tenth or hundredth		SMALL STEPS • To be able to use the column method to add whole and decimal numbers • To be able to use the column method to subtract whole and decimal numbers • To use inverse knowledge to solve missing number sentences, introducing letter notation for missing values • To solve problems involving addition and subtraction • To apply known and related facts to mentally or informally add or subtract numbers	SMALL STEPS • To multiply decimal numbers with up to 3 decimal places by 10, 100 and 1 000 • To divide integers and decimal numbers with up to 2 decimal places by 10, 100 and 1 000 • To multiply a number with up to 2 decimal places by whole numbers • To use a formal written method to multiply a 4-digit number by a 2-digit number • To be able to use the short division to divide with answers to 2 decimal places • To begin to use long division as a strategy to divide • To use formal long multiplication and division to solve word problems • To use brackets to make a calculation clearer; to know and use BIDMAS • To use mental methods for efficient calculation		SMALL STEPS • To identify and simplify fractions by finding equivalents • To place fractions on number lines • To compare and order fractions using the denominator • To compare and order fractions using the numerator • To add and subtract fractions with different denominators which are multiples • To add and subtract fractions with different denominators which are not multiples • To add mixed numbers with different denominators • To subtract a mixed number from another mixed number with denominators • To solve problems, involving fractions, with more than one calculation • To multiply fractions by integers • To multiply a fraction by a fraction • To divide a fraction by an integer • To solve a problem needing a fraction to be divided by an integer • To solve problems involving finding fractions of an amount • To find the whole when a fraction of the whole is known • To explore the relationship between fractions and their decimal equivalents • To use knowledge that fractions are divisions to convert a fraction to a decimal • To understand percentages as parts out of 100 • To convert fractions to percentages by using proportion • To find equivalent fractions, decimals and percentages using known multiples and factors • To convert fractions, decimals and percentages to enable ordering • To find the percentage of an amount by using known facts • To efficiently find a percentage of an amount by building from easily calculated percentages		

Autumn 2:

Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Ratio	Shape, space and position		Properties of number	Statistics	Recap / assessment
SMALL STEPS • To understand additive and multiplicative relationships • To use the language 'for every' to describe the relationship between items • To understand and use the symbol (:) for ratio • To explore the similarities and differences between ratios and fractions • To understand scale and proportion, using diagrams • To enlarge shapes using given scale factors • To work systematically to test shapes for similarity • To solve problems using ratio, with multiples of a quantity • To solve problems using proportion, using a double number line	SMALL STEPS • To use a protractor to measure angles and classify them • To use a protractor to draw angles • To calculate missing angles on a straight line and round a point • To investigate and calculate using vertically opposite angles • To investigate the angles of a triangle and calculate an unknown angle in a triangle • To investigate the angles in different types of triangles • To use rules about angles to calculate missing angles in a triangle • To use rules about angles to calculate missing angles in a quadrilateral • To understand the words 'radius', 'diameter' and 'circumference' • To draw shapes accurately when given specific dimensions • To visualise and draw the nets of 3-D shapes		SMALL STEPS • To use factors in problem-solving contexts • To use multiples in problem-solving contexts • To identify patterns of divisibility within multiplication tables (2,10,5,3,6,9) • To explain whether a number is prime • To solve problems involving square and cube numbers	SMALL STEPS • To read, interpret and draw line graphs • To interpret dual bar charts to draw conclusions • To read and interpret pie charts • To read and interpret pie charts • with sectors given in percentages • To calculate and interpret the mean as an average	