

Ovingham Middle School Subject Overview Year 6



Subject: Mathematics

Each column represents an approximate half term starting at 1 = September to October

	1	1.5	2	2.5	3	3.5
Topic	Number and place value. Addition and subtraction. Multiplications and division. Fractions, decimals, ratio and percentages. Measures. Algebra.	Number and place value. Multiplication and division. Fractions, decimals, ratio and percentages. Measures. Geometry.	Number and place value. Addition and subtraction. Multiplication and division. Fractions, decimals, ratio and percentages. Measures. Geometry.	Multiplication and division. Geometry. Statistics. Algebra	Number and place value. Addition and subtraction. Multiplication and division. Measures. Algebra.	Number and place value. Fractions, decimals, ratio and proportion. Geometry.
Areas of curriculum covered	Read, write, order and compare numbers up to 1, 000, 000. Use knowledge of the order of operations to carry out calculations. Multiply multi-digit numbers up to 4 digits using long multiplication. Identify the value of each digit in numbers with up to 3 decimal places. Multiply and divide numbers by 10, 100 and 1000. Solve problems involving the calculation and conversion of units of measure. Use, read, write and convert between metric measures. Begin to convert between miles and kilometres. Find pairs of numbers that satisfy an equation with two unknowns	Use negative numbers in context. Use knowledge of the order of operations to carry out calculations. Divide numbers up to 4 digits using short division. Solve problems involving the calculation of percentages. Divide proper fractions by whole numbers. Recognise that shapes with the same areas can have different perimeters and vice versa. Use formulae for area and volume of shapes. Recognise, describe and build simple 3D shapes.	Read, write, order and compare numbers up to 1, 000, 000. Round any whole number to a required degree of accuracy. Solve problems involving addition, subtraction, multiplication and division. Perform mental calculations. Multiply and divide multi-digit numbers up to 4 digits by a 1 or 2 digit whole number using formal methods. Identify common factors, common multiples and prime numbers. Associate a fraction with division and calculate decimal fraction equivalents. Multiply 1 and 2-digit numbers with up to 2 decimal places by whole numbers. Solve problems involving the calculation and conversion of units of measure. Convert between miles and kilometres. Draw 2D shapes using given dimensions and angles. Illustrate and name parts of a circle. Compare and classify geometric shapes based on their properties.	Multiply and divide multi-digit numbers up to 4 using formal methods. Use estimation to check answers to calculations. Solve problems involving addition, subtraction, multiplication and division. Solve problems involving knowledge of factors and multiples. Recognise angles around a point, on a straight line, or are vertically opposite and calculate missing angles. Describe positions of full coordinate grids. Draw and translate simple shapes on the coordinate plane, and reflect them in the axes. Interpret and construct pie charts and use these to solve problems. Interpret and construct line graphs and use these to solve problems. Calculate and interpret the mean as an average. Use simple formulae. Generate and describe linear number sequences.	Use negative numbers in context. Read, write, order and compare numbers up to 1, 000, 000 and determine the value of each digit. Solve addition and subtraction multi-step problems in context. Use knowledge of the order of operations to carry out calculations. Perform mental calculations. Divide numbers up to 4 digits by a 2-digit whole number using long division. Identify common factors, common multiples and prime numbers. Divide numbers up to 4-digits by a 2-digit number using short division. Add and subtract fractions, with different denominators and mixed numbers. Multiply pairs of proper fractions. Recognise that shapes with the same areas can have different perimeters and vice versa. Express missing numbers algebraically.	Revise equivalence simplifying fractions and changing improper fractions into mixed numbers and vice versa. Revise adding and subtracting fractions with different denominators. Revise multiplying pairs of fractions and multiplying and dividing fractions by whole numbers. Drawing 2D shapes using ruler, protractor and compasses Parts of a circle and angles in polygons. Use a protractor to measure and draw angles in degrees. Understand perimeter, area and volume.. Use mathematical reasoning to investigate and solve problems, and to estimate and predict;

Please be aware that each class is unique and although the above planning will be followed as close as possible, at times, and with individual classes, we may deliver deeper, extended learning into a topic, move faster to another topic or go slower to make sure we have clarified learning. If you are in any doubt or have any specific questions about this subject please contact the subject co-ordinator: Mrs A Kemp