Curriculum Progression for Maths

The Robert Drake Primary School

Many pupils are taught in split year group classes (1/2, 3/4 or 5/6). Therefore, there may be some variation with regards to the maths they are taught dependent on their level of understanding within that area of learning.

EYFS →	YEAR 1 →	YEAR 2 →	YEAR 3 →	YEAR 4 →	YEAR 5 →	YEAR 6
Children will learn to count items up to at least 20 and subitise smaller numbers. They will read and write numbers and add as well as subtract two numbers through counting items. They will have recall of some number bonds and know what is one more and one less than some numbers. They will be able to recognise common shapes in everyday objects and use the language of size, weight, capacity,	Pupils will read, write and order numbers from 0 to 20 and beyond. Problem solving is an integral part to learning, as well as addition and subtraction. They will learn number bonds to 10 and 20 as well as finding halves or quarters of amounts. Pupils will start to learn the 2, 5 and 10 times tables. Different coin denominations are studied. There is a focus on developing fluency so that pupils can	Pupils will demonstrate their written understanding in all four operations: addition, subtraction, multiplication and division. They will recognise place values (hundreds, tens and ones) for numbers up to at least 100. Pupils begin to use formal written methods for addition and subtraction and identify inverse relationships, as well as solve calculations with	Pupils will learn a range of strategies for calculating using the four operations of addition, subtraction, multiplication and division and how to apply these when solving word problems. Formal written methods for addition and subtraction of two-digit numbers will be taught. Pupils will review previously learnt multiplication times tables as well as start learning the 6, 7, 8 and 9 times	Pupils will learn both mental and formal written strategies for division and multiplication, which build upon pupils understanding of mental methods. All times tables will be reviewed and consolidated and pupils are expected to have fluent recall of times table facts. They will round numbers to multiples of 10, 100 or 1,000 as well as multiply numbers by 10 and 100 and use	Pupils will learn to use written strategies for multiplication of given numbers by two-digit numbers. A greater time is spent studying fractions, decimals, and introducing percentages, including calculating percentages of amounts. They will convert between mixed numbers and improper fractions, compare and order fractions and convert fractions and decimals. They	Pupils will learn formal written methods for dividing a number by two digits, as well as multiplication and division of decimal numbers. Pupils will round larger and smaller numbers, complete calculations with negative number and solve calculations using the order of operations. Pupils will learn how to multiply fractions and divide fractions by whole numbers, as well as add and

position, distance, time and money to describe objects. They will select, rotate and manipulate shapes. They will continue and create repeating patterns	calculate mentally with precision at speed. Other topics studied include measures, telling the time to every half-hour and hour, as well as identifying 2-D and 3-D shapes.	missing numbers. Revision of number bonds and times tables will take place as well as introducing the 3 and 4 times tables. They will also develop mental strategies for calculations. They will apply this knowledge to real-life problem-solving activities as well as written problems. They will find other simple fractions of amounts. They will learn properties of common shapes, start to use common units of measure, read and construct tables and pictograms as well as tell the time to five minute intervals.	tables. They will further develop mental strategies for calculations such as partitioning. They will compare and order numbers up to at least 1,000, as well as count forwards and backwards in tenths. They will add and subtract units of measure and also draw 2D shapes, measure the perimeter of 2-D shapes, construct 3-D shapes and tell the time (using both analogue and digital clocks). They will find simple equivalent fractions and complete addition and subtraction calculations with fractions of the same denominator. They will read and construct bar charts. Pupils will regularly practice their reasoning skills, through making verbal and	negative numbers. They will write and compare numbers up to two decimal places and count in tenths and hundredths. They will begin to read and write Roman numerals. They will develop their understanding of fractions, including adding fractions of the different denominators, and identify fractions of shapes. They will convert between different units of measure and find the area of basic rectilinear shapes, identify lines of symmetry in shapes, as well as acute and obtuse angles, use co-ordinate grids and interpret line graphs with larger intervals. They will continue to practise and develop mental strategies for calculations, as well as solving a wider	will compare and order numbers up to at least a million and order negative numbers. They will read and write Roman numerals up to a thousand. Through a range of multi-step problems, pupils will continue to develop their problem solving skills, including problems using a range of different measures and units. They will learn to draw and measure angles in degrees. They will start to translate and reflect shapes as well as calculate the area and perimeter of rectilinear shapes. They will use different graphical representations in statistics, including line graphs. They will continue to develop mental strategies to solve calculations efficiently.	subtract mixed numbers and convert between fractions, decimals and percentages. Pupils will learn algebra, including writing basic formula and solving equations. They will further apply their knowledge of number, shape, space and measure to a wider range of word problems including those with ratio and proportion. Pupils will calculate the volume of shapes and the area or triangles and parallelograms. They will name the parts of a circle and calculate missing angles in a range of shapes. They will use negative co-ordinates and reflect shapes in axes as well as translating shapes. They will find the mean of a set of numbers, and

			sometimes written explanations.	**variety of word problems.**		**interpret as well as begin to construct pie charts.** **All areas of learning taught in previous year groups are further consolidated to ensure pupils are well-prepared with the necessary mathematical skills and knowledge for the next stage of their maths education and in their future lives.** **Some pupils' learning will go beyond objectives set out in the National Curriculum.**