Elvington Church of England Primary School

Progression of Skills and Knowledge for Maths

Our aim is to enable children to become able and confident mathematicians who are well equipped to use maths in life and the real world.

Children should be:
*Fluent in all of the basic concepts;
*Able to use their skills to develop and follow different lines of enquiry within mathematics;
*Able to apply their knowledge confidently in a wide range of contexts and to solve a range of problems.

Working at Greater Depth in Maths:

Early Years Foundation Stage:
The criteria for children working at greater depth (Early Learning Goal) within EYFS is outlined within each individual section.

Key Stage 1 and Key Stage 2:
Children working at greater depth in KS1 and KS2 must have a secure knowledge and be working "more deeply" in all areas of expectations within their year group. They will also be able to solve problems of greater complexity (i.e. where the approach is not immediately obvious) demonstrating their maths creativity and imagination. In addition to this, children will be able to justify and explain how they have answered mathematical questions and why they have used the methods they have. Children working at greater depth may also be beginning to achieve objectives from the next year group e.g. in Year 2 these children may be beginning to count in 4,s and 8s.

Number and Place Value

Counting

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
• counts up to three or four objects by saying one number name for each item. • counts objects to 10, and beginning	▪ count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	▪ count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward	▪ count from 0 in multiples of 4, 8, 50 and 100; ▪ find 10 or 100 more or less than a given number	▪ count in multiples of 6, 7, 9, 25 and 1000 ▪ find 1000 more or less than a given number	▪ count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 ▪ interpret negative numbers in	▪ use negative numbers in context, and calculate intervals across zero

to count beyond 10. • counts out up to six objects from a larger group. ▪ count actions or objects which cannot be moved. ▪ count an irregular arrangement of up to ten objects. • finds the total number of items in two groups by counting all of them • says the number that is one more than a given number • finds one more or one less from a group of up to five objects, then ten objects **Children at greater depth will:** ▪ count reliably with numbers from one to 20, place them in order and say which number	▪ count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens ▪ given a number, identify one more and one less			▪ count backwards through zero to include negative numbers	context, count forwards and backwards with positive and negative whole numbers through zero	

is one more or one less than a given number						
Number and Place Value						
Comparing Numbers						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ use the language of 'more' and 'fewer' to compare two sets of objects	use the language of: equal to, more than, less than (fewer), most, least	▪ compare and order numbers from 0 up to 100; use and = signs	▪ compare and order numbers up to 1000	▪ order and compare numbers beyond 1000	▪ order and compare numbers to at least 1 000 000 and determine the value of each digit	▪ read and write numbers up to 10 000 000 and determine the value of each digit
Number and Place Value						
Identifying, Representing and Estimating Number						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ estimate how many objects they can see and checks by counting them ▪ records, using marks that they can interpret and explain	▪ identify and represent numbers using objects and pictorial representations including the number line	▪ identify, represent and estimate numbers using different representations, including the number line	▪ identify, represent and estimate numbers using different representations	▪ identify, represent and estimate numbers using different representations		
Number and Place Value						
Reading and Writing Numbers (including Roman Numerals)						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ recognise some numerals of	▪ read and write numbers from 1 to	▪ read and write numbers to at least	▪ read and write numbers up to	▪ read Roman numerals to 100 (I	▪ read, write, order and compare	▪ order and compare numbers

personal significance. • recognises numerals 1 to 5	20 in numerals and words	100 in numerals and in words ▪ use place value and number facts to solve problems	1000 in numerals and in words	to C) and know that over time, the numeral system changed to include the concept of zero and place value	numbers to at least 1 000 000 and determine the value of each digit ▪ read Roman numerals to 1000 (M) and recognise years written in Roman numerals	up to 10 000 000 and determine the value of each digit
Number and Place Value						
Understanding Place Value						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ select the correct numeral to represent 1 to 10 objects		▪recognise the place value of each digit in a two-digit number (tens, ones)	▪recognise the place value of each digit in a three digit number (hundreds, tens, ones)	▪recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)	▪read and write numbers to at least 1 000 000 and determine the value of each digit	▪read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
Number and Place Value						
Rounding						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
				▪ round any number to the nearest 10, 100 or 1 000	▪ round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000	▪ round any whole number to a required degree of accuracy

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Number and Place Value

Problem Solving

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
▪ begins to identify own mathematical problems based on own interests and fascinations		▪ use place value and number facts to solve problems	▪ solve number problems and practical problems involving these ideas	▪ solve number and practical problems that involve all of the above and with increasingly large positive numbers	▪ solve number problems and practical problems that involve all of the above	▪ solve number and practical problems that involve all of the above

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Addition and Subtraction

Number Bonds

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	▪ represent and use number bonds and related subtraction facts within 20	▪ recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100				

Addition and Subtraction

Mental Calculation

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
▪begin to use the vocabulary involved in adding and subtracting in practical activities and discussion **Children working at greater depth will:** ▪ use quantities and objects, they add and subtract two single-digit	▪read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs ▪ add and subtract one-digit and two-digit numbers to 20, including zero number problems such as 7 = - 9	▪ add and subtract numbers using concrete objects, pictorial representations, and mentally, including: ▪ a two-digit number and ones ▪ a two-digit number and tens ▪ two two-digit numbers ▪ adding three one-digit numbers ▪ show that addition of two numbers can	▪ add and subtract numbers mentally, including: ▪ a three-digit number and ones ▪ a three-digit number and tens ▪ a three-digit number and hundreds	▪continue to practise mental methods with increasingly larger numbers	▪ add and subtract numbers mentally with increasingly large numbers	▪ perform mental calculations, including with mixed operations and large numbers

numbers and count on or back to find the answer		be done in any order (commutative) and subtraction of one number from another cannot				

Addition and Subtraction

Written Methods

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	▪read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs		▪ add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	▪ add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	▪ add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)	▪ solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why ▪use their knowledge of the order of operations to carry out calculations involving the four operations

Addition and Subtraction

Inverse Operations, Estimating and Checking Answers

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		▪ recognise and use the inverse relationship between addition and subtraction and	▪ estimate the answer to a calculation and use inverse operations to check answers	▪ estimate and use inverse operations to check answers to a calculation	▪ use rounding to check answers to calculations and determine, in the context of a	▪ use estimation to check answers to calculations and determine, in the context of a

		use this to check calculations and missing number problems			problem, levels of accuracy	problem, levels of accuracy
Addition and Subtraction						
Problem Solving						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ Begin to identify own mathematical problems based on own interests and fascinations	▪ solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = - 9	▪ solve problems with addition and subtraction: * using concrete objects and pictorial representations, including those involving numbers, quantities and measures * applying their increasing knowledge of mental and written methods	▪ solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction	▪ solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	▪ solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why	▪ solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

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Multiplication and Division						
Multiplication and Division Facts						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
	▪count in multiples of twos, fives and tens	▪ count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward ▪ recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	▪ count from 0 in multiples of 4, 8, 50 and 100 ▪ recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables	▪ count in multiples of 6, 7, 9, 25 and 1 000 ▪ recall multiplication and division facts for multiplication tables up to 12 × 12	▪ count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000	
Multiplication and Division						
Mental Calculation						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
		▪ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	▪ write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one digit	▪ use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers	▪ multiply and divide numbers mentally drawing upon known facts ▪ multiply and divide whole numbers and those involving decimals by 10, 100 and 1000	▪ perform mental calculations, including with mixed operations and large numbers

			numbers, using mental and progressing to formal written methods	▪ recognise and use factor pairs and commutativity in mental calculations		
Multiplication and Division						
Written Calculation						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
		▪ calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs	▪ write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	▪ multiply two-digit and three-digit numbers by a one-digit number using formal written layout	▪ multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers ▪ divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context	▪ multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication ▪ 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 ▪divide numbers up to 4-digits by a two-

						digit whole number using the formal written method of short division where appropriate for the context, interpreting reminders according to the context ▪ use their knowledge of the order of operations to carry out calculations involving the four operations
Multiplication and Division						
Properties of numbers: Multiples, Factors, Primes, Square and Cube Numbers						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
				▪ recognise and use factor pairs and commutativity in mental calculations	▪ identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers ▪ know and use the vocabulary of prime numbers, prime factors and	▪ identify common factors, common multiples and prime numbers

					composite (non-prime) numbers ▪ establish whether a number up to 100 is prime and recall prime numbers up to 19 ▪ recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)	
Multiplication and Division						
Problem Solving and Estimating						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Children at greater depth will: ▪ solve problems, including doubling, halving and sharing	▪ solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher	▪ solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts	▪ solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects. Multiplication and division, using materials, arrays,	▪ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects	▪ solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign ▪ solve problems involving multiplication and division, including scaling by simple fractions and	▪ use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy ▪ solve problems involving multiplication, division, addition and subtraction

			repeated addition, mental methods, and multiplication and division facts, including problems in contexts		problems involving simple rates. ▪ solve problems involving multiplication and division where larger numbers are used by decomposing them into their factors	

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Fractions (including Decimals and Percentages)						
Counting in Fractions						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
		▪ count in fractions up to 10, starting from any number and using the1/2 and 2/4 equivalence on the number line	▪ count up and down in tenths	▪ count up and down in hundredths		
Fractions (including Decimals and Percentages)						
Recognising Fractions						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
	▪recognise, find and name a half as one of two equal parts of an object, shape or quantity ▪ recognise, find and name a quarter as one of four equal parts of an object, shape or quantity	▪ recognise, find, name and write fractions 1 / 3 , 1 / 4 , 2 / 4 and 3 / 4 of a length, shape, set of objects or quantity	▪ recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 ▪ recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators ▪ recognise and use fractions as numbers: unit fractions and non-	▪ recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten	▪ recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents	

			unit fractions with small denominators			
Fractions (including Decimals and Percentages)						
Comparing Fractions and Decimals						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
			▪ compare and order unit fractions, and fractions with the same denominators	▪ compare numbers with the same number of decimal places up to two decimal places	▪ compare and order fractions whose denominators are all multiples of the same number ▪ read, write, order and compare numbers with up to three decimal places	▪ compare and order fractions, including fractions >1 ▪ identify the value of each digit to three decimal places
Fractions (including decimals and percentages)						
Rounding Decimals						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
				▪ round decimals with one decimal place to the nearest whole number	▪ round decimals with two decimal places to the nearest whole number and to one decimal place	▪ solve problems which require answers to be rounded to specified degrees of accuracy
Fractions (including Decimals and Percentages)						
Equivalence						

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EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		▪ write simple fractions e.g. 1 / 2 of 6 = 3 and recognise the equivalence of 2 / 4 and 1 / 2	▪ recognise and show, using diagrams, equivalent fractions with small denominators	▪ recognise and show, using diagrams, families of common equivalent fractions ▪ recognise and write decimal equivalents of any number of tenths or hundredths ▪ recognise and write decimal equivalents to 1 / 4 ; 1 / 2 ; 3 / 4	▪ identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths ▪ read and write decimal numbers as fractions (e.g. 0.71 = 71/ 100) ▪ recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents ▪ recognise the per cent symbol (%) and understand that per cent relates to “number of parts per hundred”, and write percentages as a fraction with denominator hundred, and as a decimal fraction	▪ use common factors to simplify fractions; use common multiples to express fractions in the same denomination ▪ associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3 / 8) ▪ recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
Fractions (including Decimals and Percentages)						

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Addition, Subtraction, Multiplication and Division of Fractions and Decimals						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
			▪ add and subtract fractions with the same denominator within one whole (e.g. 5 / 7 + 1 / 7 = 6 / 7)	▪ add and subtract fractions with the same denominator ▪ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths	▪ recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. 2 / 5 + 4 / 5 = 6 / 5 = 11 / 5) ▪ add and subtract fractions with the same denominator and multiples of the same number ▪ multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	▪ add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions ▪ multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. 1 / 4 × 1 / 2 = 1 / 8) ▪ divide proper fractions by whole numbers (e.g. 1 / 3 ÷ 2 = 1 / 6) ▪ multiply one-digit numbers with up to two decimal places by whole numbers ▪ use written division methods in cases where the answer has up to two decimal places ▪ associate a fraction with division and calculate decimal

						fraction equivalents (e.g. 0.375) for a simple fraction (e.g. 3 /8) ▪multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places
Fractions (including Decimals and Percentages)						
Problem Solving						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
			▪ solve problems that involve all of the above	▪ solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number ▪ solve simple measure and money problems involving fractions and decimals to two decimal places	▪ solve problems involving number up to three decimal places ▪ solve problems which require knowing percentage and decimal equivalents of 1 / 2 , 1 / 4 , 1 / 5 , 2 / 5 , 4 / 5 and those with a denominator of a multiple of 10 or 25	

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Ration and Proportion/ Algebra						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
						Ration and Proportion: ▪ solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts ▪ solve problems involving the calculation of percentages (e.g. of measures) such as 15% of 360 and the use of percentages for comparison ▪ solve problems involving similar shapes where the scale factor is known or can be found ▪ solve problems involving unequal sharing and grouping using knowledge of fractions and multiples **Algebra**: ▪ express missing number problems algebraically ▪ use simple formulae expressed in words ▪ generate and describe linear number sequences ▪ find pairs of numbers that satisfy number sentences involving two unknowns ▪ enumerate all possibilities of combinations of two variables

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Measurement						
Measuring and Calculating						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ describe their relative position such as 'behind' or 'next to'	▪ measure and begin to record the following: ▪ lengths and heights ▪ mass/weight ▪ capacity and volume	▪ choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels	▪ measure: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	▪ estimate, compare and calculate different measures, including money in pounds and pence	▪ use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation including scaling	▪ use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places ▪ convert between miles and kilometres
Measurement						
Comparing, Estimating and Converting Measures						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ order two or three items by length or height ▪ order two items by weight or capacity	▪ compare, describe and solve practical problems for: ▪ lengths and heights (e.g. long/short, longer/shorter,	▪ compare and order lengths, mass, volume/capacity and record the results using >, < and =	▪ compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	▪ convert between different units of measure (e.g. kilometre to metre; hour to minute) ▪ estimate, compare and calculate different	▪ estimate volume (e.g. using 1 cm3 blocks to build cubes and cuboids) and capacity (e.g. using water) ▪convert between different units of	▪ calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm 3) and cubic

Children working at greater depth will: ▪ use everyday language to talk about size, weight, capacity, position and distance to compare quantities and objects and to solve problems	tall/short, double/half) ▪ mass or weight (e.g. heavy/light, heavier than, lighter than) ▪ capacity/volume (full/empty, more than, less than, quarter)			measures, including money in pounds and pence	metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) ▪ understand and use equivalences between metric units and common imperial units such as inches, pounds and pints	metres (m 3), and extending to other units such as mm 3 and km 3 . ▪ solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
Measurement						
Perimeter and Area of Shapes						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
			▪ measure the perimeter of simple 2-D shapes	▪ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres ▪ find the area of rectilinear shapes by counting squares	▪ measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres ▪ calculate and compare the area of squares and rectangles including using standard units, square centimetres	▪ recognise that shapes with the same areas can have different perimeters and vice versa ▪ calculate the area of parallelograms and triangles ▪ recognise when it is possible to use formulae for area

					(cm2) and square metres (m2) and estimate the area of irregular shapes	and volume of shapes
Measurement						
Money						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
•beginning to use everyday language related to money **Children working at greater depth will:** ▪ use everyday language to talk about money to compare quantities and objects and to solve problems	▪ recognise and know the value of different denominations of coins and notes	▪ recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value ▪ find different combinations of coins that equal the same amounts of money ▪ solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change	▪ add and subtract amounts of money to give change, using both £ and p in practical contexts	▪ estimate, compare and calculate different measures, including money in pounds and pence	▪ use all four operations to solve problems involving measure (e.g. money) using decimal notation including scaling.	▪ solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate

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Measurement						
Telling the Time						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ measure short periods of time in simple ways ▪ order and sequence familiar events ▪ use everyday language related to time	▪ measure and begin to record the following: ▪ time (hours, minutes, seconds) ▪ sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening ▪ recognise and use language relating to dates, including days of the week, weeks, months and years ▪ tell the time to the hour and half past the hour and draw the hands on a clock face to show these times	▪ tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times	▪ tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks ▪ estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight	▪ read and write time between analogue and digital 12 and 24-hour clocks		

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Measurement						
Converting and Comparing Time						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Children working at greater depth will: ▪ use everyday language to talk about time and to compare quantities to solve problems	solve practical problems for: ▪ time (quicker, slower, earlier, later	▪ compare and sequence intervals of time ▪ know the number of minutes in an hour and the number of hours in a day	▪ know the number of seconds in a minute and the number of days in each month, year and leap year ▪ compare durations of events, for example to calculate the time taken by particular events or tasks	▪ convert time between analogue and digital 12 and 24-hour clocks ▪ convert between different units of measure (e.g. hour to minute) ▪ solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	▪ solve problems involving converting between units of time	▪ use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places ▪ solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate

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Geometry (Properties of Shape)

Identifying shapes and their properties

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
▪ use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. •selects a particular named shape **Children working at greater depth will:** ▪ explore characteristics of everyday objects and shapes and use mathematical language to describe them	▪ recognise and name common 2-D and 3-D shapes, including: ▪ 2-D shapes (e.g. rectangles (including squares), circles and triangles) ▪ 3-D shapes (e.g. cuboids (including cubes), pyramids and spheres).	▪ identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line ▪ identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces ▪ identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid	▪describe 2D and 3D shapes in different orientations	▪ identify lines of symmetry in 2-D shapes presented in different orientations	▪ identify 3-D shapes, including cubes and other cuboids, from 2-D representations	▪ recognise, describe and build simple 3-D shapes, including making nets ▪ name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius

Geometry (Properties of Shape)

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Drawing and Constructing						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ use familiar objects and common shapes to create and recreate patterns and build models **Children working at greater depth will:** ▪ recognise, create and describe patterns		▪ draw lines and shapes using a straight edge	▪ draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations	▪ complete a simple symmetric figure with respect to a specific line of symmetry	▪ draw given angles, and measure them in degrees (o)	▪ draw 2-D shapes using given dimensions and angles ▪ recognise, describe and build simple 3-D shapes, including making nets ▪ illustrate parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
<u>Geometry (Properties of Shape)</u>						
Comparing and Classifying						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
		▪ compare and sort common 2-D and 3-D shapes and everyday objects		▪ compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	▪ use the properties of rectangles to deduce related facts and find missing lengths and angles ▪ distinguish between regular and irregular polygons based on reasoning about	▪ compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons

					equal sides and angles	
Geometry (Properties of Shape)						
Angles						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
			▪ recognise that angles are a property of shape or a description of a turn ▪ identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle ▪ identify horizontal and vertical lines and pairs of perpendicular and parallel lines	▪ identify acute and obtuse angles and compare and order angles up to two right angles by size ▪ identify lines of symmetry in 2-D shapes presented in different orientations	▪ know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles ▪ identify: ▪ angles at a point and one whole turn (total 360o) ▪ angles at a point on a straight line and ½ a turn (total 180o) ▪ other multiples of 90o ▪ use the properties of rectangles to deduce related facts and find missing lengths and angles	▪ recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles

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Geometry (Position and Direction)						
Position, Direction and Movement						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ describe their relative position such as 'behind' or 'next to'	▪ describe position, directions and movements, including half, quarter and three quarter turns	▪ use mathematical vocabulary to describe position, direction and movement including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns (clockwise and anti-clockwise), and movement in a straight line		▪ describe positions on a 2-D grid as coordinates in the first quadrant ▪ describe movements between positions as translations of a given unit to the left/right and up/down ▪ plot specified points and draw sides to complete a given polygon	▪ identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed	▪ describe positions on the full coordinate grid (all four quadrants) ▪ draw and translate simple shapes on the coordinate plane, and reflect them in the axes
Geometry (Position and Direction)						
Pattern						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
▪ use familiar objects and common shapes to create and recreate patterns and build models		▪ order and arrange combinations of mathematical objects in patterns				

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Statistics						
Interpreting, Constructing and Presenting Data						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
		▪ interpret and construct simple pictograms, tally charts, block diagrams and simple tables ▪ ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ▪ ask and answer questions about totalling and comparing categorical data	▪ interpret and present data using bar charts, pictograms and tables	▪ interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs	▪ complete, read and interpret information in tables, including timetables	▪ interpret and construct pie charts and line graphs and use these to solve problems

Statistics						
Solving Problems						
EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
			▪ solve one-step and two-step questions such as 'How many more?'	▪ solve comparison, sum and difference problems using information	▪ solve comparison, sum and difference problems using information	▪ calculate and interpret the mean as an average.

			and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables	presented in bar charts, pictograms, tables and other graphs	presented in a line graph	