



Mathematics Core Skills Progression Year 1-6

These skills are the essential learning that all children need to have a secure understanding of, in order to successfully progress to the next stage of learning and meet at least expected standards by the end of Key Stages 1 and 2. A breakdown of Foundation Stage skills are on the next page.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1	<ol style="list-style-type: none"> Count up to 30 Order numbers up to 30 Write and interpret mathematical statements '+', '-' and '=' Recognise rectangle, square, triangle and circle 	<ol style="list-style-type: none"> Read and write 2-digit numbers Compare and order numbers up to 100 Recall and use addition facts to 10 Find 10 more or less than a 2-digit number Add two 2-digit numbers Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces 	<ol style="list-style-type: none"> Read and write 3-digit numbers Compare and order numbers up to 1000 Find 10 or 100 more or less than a given number Recognise and count in tenths Recognise horizontal, vertical, perpendicular and parallel lines 	<ol style="list-style-type: none"> Read and write 4-digit numbers Compare and order numbers up to 10,000 Round any number up to 4-digits to the nearest 10, 100 or 1000 Classify quadrilaterals 	<ol style="list-style-type: none"> Read and write numbers up to 1,000,000 Compare and order numbers up to 1,000,000 Compare and order decimals with up to 3 decimal places Round numbers to 1 decimal place, nearest whole number and 10, 100, 1000, 10000 Count forwards and backwards with positive and negative numbers 	<ol style="list-style-type: none"> Read, write and order numbers up to 10,000,000 Multiply and divide numbers by 10, 100 and 1000 Multiply numbers up to 4 digits by a 2-digit number choosing efficient methods Divide numbers up to 4 digits by a two-digit number choosing efficient methods and interpreting the remainder Calculate intervals across zero Describe and plot positions on a 3-D grid as coordinates in the four quadrants Reflect and translate shapes
Term 2	<ol style="list-style-type: none"> Write numbers to 100 in numerals Compare and order numbers to 100 Identify one more and one less than a given number Represent and use number bonds within 10 (addition facts) Represent and use number bonds within 10 (subtraction facts) Recognise cuboids, pyramids and spheres 	<ol style="list-style-type: none"> Know that addition is commutative and subtraction is not Subtract two 2-digit numbers Recall and use subtraction facts to 10 Understand how multiplication can be represented Know that multiplication is commutative and division is not Understand how division can be represented Describe turn using right angles 	<ol style="list-style-type: none"> Add numbers with up to 3-digits mentally Subtract numbers with up to 3-digits mentally Know and use multiplication facts for 3, 4 and 8 multiplication tables Know and use division facts for 3, 4 and 8 multiplication tables 	<ol style="list-style-type: none"> Add and subtract numbers with up to 4-digits mentally Know and use multiplication facts for 6, 7 and 9 multiplication tables Know and use division facts for 6, 7 and 9 multiplication tables 	<ol style="list-style-type: none"> Add and subtract whole numbers with more than 4 digits choosing efficient methods Know and use multiplication facts for 6, 7 and 9 multiplication tables Know and use division facts for 6, 7 and 9 multiplication tables Multiply and divide whole numbers and decimals by 10, 100 and 1000 Identify and use multiples, factors and prime numbers 	<ol style="list-style-type: none"> Simplify fractions Compare and order fractions, including fractions > 1 Know and use simple fraction, decimal and percentage equivalents Compare and classify 3-D and 3-D shapes Know and use angle properties of straight lines, of a point and shapes Draw simple shapes using given lengths and angles
Term 3	<ol style="list-style-type: none"> Represent and use number bonds for 11 to 16 (addition facts) Represent and use number bonds for 11 to 16 (subtraction facts) Measure length and height 	<ol style="list-style-type: none"> Know and use multiplication facts for 2, 5 and 10 multiplication tables Know and use division facts for 2, 5 and 10 multiplication tables Read scales in divisions of 1, 2, 5 and 10 Use standard units to measure length, mass and height 	<ol style="list-style-type: none"> Compare and order fractions with same numerator or same denominator Add numbers with up to 3-digits using a formal written method Subtract numbers with up to 3-digits using a formal written method Choose efficient methods to add and subtract numbers up to 3-digits 	<ol style="list-style-type: none"> Add and subtract numbers with up to 4-digits using a formal written method Know and use multiplication facts for 11 and 12 multiplication tables Choose efficient methods to add and subtract numbers up to 4-digits 	<ol style="list-style-type: none"> Multiply numbers up to 4-digits by 1 or 2-digits using a formal written method Divide numbers up to 4-digits by 1-digit using a formal written method of division Use known facts and place value to multiply a whole number by a decimal Multiply decimal numbers (1 or 2 decimal places) by 1-digit using a formal written method 	<ol style="list-style-type: none"> Add and subtract fractions with denominators that are not multiples of each other Add and subtract mixed numbers Multiply simple pairs of proper fractions Divide proper fractions by a whole number
Term 4	<ol style="list-style-type: none"> Represent and use number bonds within 20 (addition facts) Represent and use number bonds within 20 (subtraction facts) Recognise and find one half Recognise and find one quarter Use the language position, direction and movement 	<ol style="list-style-type: none"> Recognise and find one third Recognise and find three quarters Tell the time to quarter to/past and 5 minute intervals Calculate change Use standard units to make amounts 	<ol style="list-style-type: none"> Multiply 2-digit by 1-digit numbers mentally Divide 2-digit by 1-digit numbers mentally Multiply 2-digit by 1-digit numbers using a formal written method 	<ol style="list-style-type: none"> Multiply 2-digit by 1-digit using the distributive law Multiply 3-digit by 1-digit using a formal written method Divide a 3-digit by a 1-digit number Use place value, known and derived facts to multiply and divide mentally Identify acute and obtuse angle 	<ol style="list-style-type: none"> Compare and order fractions whose denominators are all multiples of the same number Read and write decimal numbers (up to 3 decimal places) as fractions Understand that per cent relates to 'number of parts per 100' and write percentages as a fraction with denominator 100 Convert between adjacent units of metric measure 	<ol style="list-style-type: none"> Find percentages of an amount Use simple ratio to compare quantities Convert between different units of metric measure Calculate the area of triangles/parallelograms Calculate volumes of cuboids Use simple formulae expressed in words Find possible values in missing number problems involving one or two unknowns
Term 5	<ol style="list-style-type: none"> Add and subtract 1 and 2-digit numbers up to 20 Know the days of the week and months of the year Tell the time to the hour and half past 	<ol style="list-style-type: none"> Construct and interpret pictograms using 2s, 5s and 10s Recall factor-factor-product relationships for 2, 5 and 10 multiplication tables 	<ol style="list-style-type: none"> Calculate fractions of amounts Add and subtract fractions with the same denominator Tell the time to the nearest minute Calculate durations of events 	<ol style="list-style-type: none"> Divide 1 and 2-digit numbers by 10 and 100 Add and subtract fractions with the same denominator beyond the whole Find families of equivalent fractions Recall factor-factor-product relationships for 3, 7, 9, 11 and 12 multiplication tables 	<ol style="list-style-type: none"> Convert mixed numbers to improper fractions and vice versa Add mixed numbers and proper fractions with denominators that are the same and multiples of each other Subtract proper fractions from mixed numbers with denominators that are the same and multiples of each other Multiply fractions and mixed numbers by a whole number 	
Term 6	<ol style="list-style-type: none"> Represent multiplication using concrete objects and pictorial representations Represent division using concrete objects and pictorial representations Recognise and know the value of different denominations of coins and notes 	<ol style="list-style-type: none"> Construct and interpret pictograms using 2s, 5s and 10s Recall factor-factor-product relationships for 3, 4 and 8 multiplication tables 	<ol style="list-style-type: none"> Measure the perimeter of shapes Identify angles in shapes Interpret bar charts Recall factor-factor-product relationships for 3, 4 and 8 multiplication tables 	<ol style="list-style-type: none"> Add and subtract decimal numbers (up to 2 decimal places) including measures and money Find the area of rectilinear shapes by counting squares Describe and plot positions on a 3-D grid as coordinates in the first quadrant Convert between analogue and digital 12 and 24-hour clocks and other units of time 	<ol style="list-style-type: none"> Calculate the area of rectangles Draw given angles and measure them, in degrees (°) Interpret line graphs 	

Foundation Stage Key Skills

Year R KPIs
Recite the number sequence.
Count to and from different numbers, forwards
Count to and from different numbers, backwards
Count objects accurately
Subitise
Select a numeral to represent a quantity in a group
Find the group that has more or less
Compare two numbers saying which is larger or smaller
Order numbers
Identify something longer or shorter than something else
Continue or create a repeating pattern
Identify similarities and differences between 3D shapes
Combine two quantities to add
Count on to add
Find one more
Take away and say what is left
Find one less
Partition numbers into two parts
Partition numbers into more than two parts
Say how many are hidden in a known number of items
Find something heavier or lighter than something else
Use positional language
Identify similarities and differences between 2D shapes
Order events