

Weeks	Learning Outcome	Key Vocabulary	RTP (Ready To Progress)	
1-3	<u>Shape</u> - Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles - Draw given angles, and measure them in degrees (°) - Identify angles at a point and 1 whole turn (total 360°) - Identify: angles at a point and 1 whole turn (total 360°); angles at a point on a straight line and half a turn (total 180°) - 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 equal sides and angles - Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.	Angle, faces, regular, irregular, polygon, quarter turn, right angle, acute, obtuse, reflex, cuboid, cube, vertices, protractor		
4-5	<u>Position and Direction</u> 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.	Mirror line, reflection axis, points, x-axis, y-axis, vertices, translation, origin, coordinates, a-value, y-value, object, image		
6-8	<u>Decimals</u> - Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents - Solve problems involving number up to 3 decimal places - Read, write, order and compare numbers with up to 3 decimal places - Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000	Thousandths, tenths, sum, altogether, decimal place, subtract, decimal points, difference, add, hundredths, tens time bigger, one thousand times smaller, inverse		
9	<u>Numbers: Negative Numbers</u> Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	Negative, negative two -2, negative 1 -1, zero 0, one 1, two 2, multiples, number line, greater than>, less than<, difference		
10-11	<u>Converting Units</u> - Convert between different units of metric measure [for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre] - Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints - Solve problems involving converting between units of time	Divided by 1000, multiply by 1000, convert, 1/10 of a litre, 0.4 of an hour, kilo, kilogram, kilometre, Milli, millimetre, millilitre, Inch, length, Pound (£), mass, Pint, capacity		
12	<u>Measurement: Volume</u> - Estimate volume [for example, using 1 cm³ blocks to build cuboids (including cubes)] and capacity - Estimate volume and capacity [for example, using water]	Volume: the amount of solid space of an object, equal to, 3d shape, capacity: the amount a container can hold, less than, greater than, cubic centimetre, cubic metre		

Weeks	Learning Questions	Key Vocabulary	RTP (Ready To Progress)	
1-3	<u>Place Value</u> - Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals - Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit - Solve number problems and practical problems involving the above - Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 - Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000	Number, numeral, zero, one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred, two hundred, one thousand, ten thousand, hundred thousand, million none, count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on to hundreds, thousands equal to equivalent to is the same as more, less most, least tally many odd, even multiple of, factor of factor pair sequence continue predict few pattern pair, rule relationship, next, consecutive > greater than < less than ≥ greater than or equal to ≤ less than or equal to Roman numerals integer, positive, negative above/below zero, minus negative numbers formula divisibility square number prime number ascending/descending order		
4-5	<u>Addition and Subtraction</u> - Add and subtract numbers mentally with increasingly large numbers - Add and subtract whole numbers with more than four 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 - Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000 • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	addition add, more, and make, sum, total altogether double near double half, halve one more, two more, ten more, one hundred more, difference between equals is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary, ones boundary, tenths boundary inverse		
6-8	<u>Multiplication and Division A</u> - Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers - Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes - Know and use the vocabulary of prime numbers, prime factors and 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) - Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 - Multiply and divide numbers mentally, drawing upon known facts	multiplication multiply multiplied by multiple, factor groups of times product once, twice, three times ... ten times repeated addition division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact, inverse square, squared cube, cubed	5MD-1	Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size.
			5MD-2	Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors.
			5NF-1	Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.
9-12	<u>Fractions A</u> - Identify, name and write equivalent fractions of a given fraction, represented visually, including 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 - Compare and order fractions whose denominators are all multiples of the same number - Add and subtract fractions with the same denominator, and denominators that are multiples of the same number	fraction, proper/improper fraction equivalent fraction mixed number numerator, denominator equivalent, reduced to, cancel equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts sixths, sevenths, eighths, tenths ... hundredths, thousandths decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion,	5F-2	Find equivalent fractions and understand that they have the same value and the same position in the linear number system.

Spring

Weeks	Learning Outcome	Key Vocabulary	RTP (Ready To Progress)	
1-3	<u>Number: Multiplication and Division</u> - Multiply numbers up to four digits by a 1- or 2-digit number using a formal written method, including long multiplication for 2-digit numbers - Divide up to four digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context - Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes	multiply groups of lots of times divide share remainder factor multiple product	5MD-3	Multiply any whole number with up to 4 digits by any one-digit number using a formal written method.
			5MD-4	Divide a number with up to 4 digits by a one-digit number using a formal written method and interpret remainders appropriately for the context.
			5NF-1	Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.
4-5	<u>Number: Fraction B</u> - Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams - 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 (Y4)	numerator denominator unit fraction nonunit fraction whole equivalent mixed number improper fraction simplest form multiple common denominator common numerator	5NF-1	Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.
			5F-1	Find non-unit fractions of quantities.
6-8	<u>Number: Decimals and Percentages</u> - Read, write, order and compare numbers with up to 3 decimal places - Read and write decimal numbers as fractions - Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths - Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 - Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents - Solve problems involving numbers up to 3 decimal places - Round decimals with 2 decimal places to the nearest whole number and to 1 decimal place - Recognise the per cent symbol (%) and understand that per cent relates to “number of parts per 100”, and write percentages as a fraction with denominator 100, and as a decimal fraction	decimal place, decimal fraction, recurring decimal, equivalent fraction, tenth sharing partitioning exchanging rounding to 3d.p. hundredth thousandth equal to remainder grouping decimal point, decimal equivalent proportion, in every, for every percentage, per cent, %	5F-3	Recall decimal fraction equivalents for $\frac{1}{4}$, $\frac{1}{2}$, $\frac{1}{5}$ and $\frac{1}{10}$ and for multiples of these proper fractions.
9-10	<u>Measurement: Perimeter and Area</u> - Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres - Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm²) and square metres (m²), and estimate the area of irregular shapes	measure measurement size compare unit, standard unit metric unit, imperial unit measuring scale, division guess, estimate enough, not enough too much, too little	5G-2	Compare areas and calculate the area of rectangles (including squares) using standard units.
11-12	<u>Statistics</u> - Solve comparison, sum and difference problems using information presented in a line graph - Complete, read and interpret information in tables, including timetables	Axis, continuous data, horizontal, interpret, label, line graph, maximum value, minimum value, pattern, predict, relationship, represent, scale, survey, table, tally, timetable, vertical, y-axis, x-axis		