Maths Progression Map Year 5

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Number and Place Value	Read and write numbers to 1,000,000 and determine the value of each digit Compare and order number to 1,000,000 Count forwards and backwards in steps of powers of 10 for any given number to 1,000,000 Interpret negative numbers in context, count forwards and backwards with negative and positive whole numbers, including through zero Round any number up to 1 million to the nearest 10, 100, 1000, 10,000 and 100,000 Read Roman numbers to 1000 and recognise years				Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero Use rounding to check answers to calculations and determine, in the context of a problem the levels of accuracy.	Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000.
Addition and Subtraction	Add and subtract whole numbers with more than 4-digits, including using formal written methods Add and subtract numbers mentally. Solve addition and subtraction multi-step problems. Use rounding to check answers to calculations				Add and subtract whole numbers with more than 4-digits, using formal written methods. Solve addition and subtraction multi-step problems.	
Multiplication and Division	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	Multiply numbers up to 4 digits by a one-digit or two-digit number, including long multiplication for two-digit numbers Divide numbers up to four-digit by a one-digit number using the formal written method of short division and		Identify multiples and factors including all factor pairs of a number, and common factors of two numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19.	Multiply up to 4 digits by one or two-digit numbers using formal written methods. Divide numbers up to 4 digits by a one-digit number using formal written methods. Multiply and divide numbers by 10, 100 and 1000.	Solve multiplication and division problems using their knowledge of factors and multiples, squares and cubes. Solve problems involving multiplication and division, including scaling by simple

	numbers, prime factors and composite numbers. Establish whether a number up to 100 is prime and recall prime numbers to 19. Multiply numbers up to 4 digits by a one-digit or two-digit number, including long multiplication for two-digit numbers. Multiply and divide numbers mentally drawing upon known facts.	interpret remainders in context Multiply and divide whole number and those involving decimals by 10, 100 and 1000		Recognise squared and cube numbers. Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes	Identify multiples and factors pairs and common factors. Know and use the vocabulary of prime and composite numbers. Solve problems involving multiplication and division.	fractions and problems involving simple rates.
Fractions (including decimals and percentages)		Compare and order fractions whose denominators are all multiples of the same number Identify, name and write equivalent fractions of a fraction, represented visually, including tenths and hundredths Recognise mixed numbers and improper fractions and convert from one form to the other Add and subtract fractions with the same denominator that are multiples of the same number	Multiply proper fractions and mixed numbers by whole numbers. Read and write decimals as fractions Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Round decimals to the nearest whole number and 1 d.p. Compare and order decimals with up to 3 decimal places. Recognise and understand the % symbol. Convert between percentages and decimal equivalents. Solve problems using percentage and decimal equivalents.	Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths or hundredths Recognise mixed numbers and improper fractions and convert between them. Add and subtract fractions with the same and different denominators	Round decimals to the nearest whole number and 1dp.	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 [for example, 2 /5 + 4 /5 = 6 /5 = 11 /5] Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers. Read and write decimal numbers as fractions [for example, 0.71 = 71/100] Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents Round decimals with two decimal places to the nearest whole number and to one decimal place Read, write, order and compare numbers with up to three decimal places.

						Solve problems involving numbers up to three decimal places. Write percentages as a fraction and decimal. Solve problems which require knowing percentages and decimal equivalents.
Measurement			Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 Convert between metric units of length, capacity and weight	Measure and calculate the perimeter of composite rectilinear shapes Calculate and compare the area of rectangles and estimate the area of irregular shapes Estimate volume and capacity Convert between units of time Solve problems involving converting between units of time.	Convert between different units of metric measure and use all four operations to solve problems Understand and use approximate equivalences between metric and imperial units	Use approximate equivalences between metric and imperial units of measure.
Geometry		Calculate and compare the area of rectangles (including squares) and estimate the area of irregular shapes Measure and calculate the perimeter of composite rectilinear shapes in cm and mm Identify 2-D and 3-D shapes, including 2-D representations of 3-D shapes	Know that 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 one whole turn; angles at a point on a straight line; other multiples of 90°. Use properties of shapes to deduce related missing angles.		Identify 3D shapes, including cubes and other cuboids, from 2D representations	Identify, describe and represent a shape following a reflection, translation or rotation
Statistics		Complete, read and interpret information in tables, including timetables Solve comparison, sum and difference problems using information presented in a line graph	Complete, read and interpret information in tables, including timetables			Solve comparison, sum and difference problems using information presented in a line graph. Complete, read and interpret information in tables, charts and graphs.