

Year 5	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn	Number: Place Value CSM 156-161				Number: Addition & Subtraction CSM 162-165		Number: Multiplication & Division CSM 166-171			Number: Fractions CSM 177-181				
	[KEY] Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit. 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, 1000, 10 000 and 100 000. [KEY] Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. Solve number problems and practical problems that involve numbers up to 1000000, negative numbers, rounding or jumping in steps. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.				[KEY] Add and subtract numbers mentally with increasingly large numbers. [KEY] Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.		[KEY] 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 composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19. 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.			Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. [KEY] Compare and order fractions whose denominators are all multiples of the same number. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements greater than 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}$]. Add and subtract fractions with the same denominator and denominators that are multiples of the same number.				

	Week 1	Week 2	Week 3	Week 4	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	
Spring	Number: Fractions, Decimals and Percentages CSM 182-188 Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. [KEY] 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. [KEY] Read, write, order and compare numbers with up to three decimal places. Solve problems involving number up to three decimal places. 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 100, and as a decimal. [KEY] Solve problems which require knowing percentage and decimal equivalents of $1/2$, $1/4$, $1/5$, $2/5$, $4/5$ and those fractions with a denominator of a multiple of 10 or 25.				Number: Multiplication & Division CSM 169, 172, 173 Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3). [KEY] Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.	Measurement: Converting Units CSM 189-190 194-195 [KEY] 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.		Statistics CSM 205-206 Solve comparison, sum and difference problems using information presented in a line graph. [KEY] Complete, read and interpret information in tables, including timetables. Solve problems involving converting between units of time.		Decimals CSM 186 Solve problems involving number up to three decimal places.	
						Measurement: Volume CSM193 Estimate volume [for example, using 1 cm ³ blocks to build cuboids (including cubes)] and capacity [for example, using water].					

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	
Summer	Geometry: Position and Direction CSM 204		Geometry: Properties of Shape CSM 196-203				Measurement: Perimeter & Area CSM 191-192		Number: Multiplication & Division [KEY] Solve problems involving multiplication and division using their knowledge of factors and multiples, squares and cubes. Multiply and divide numbers mentally drawing upon known facts.	Decimals CSM 186 Solve problems involving number up to three decimal places.	Number: Fractions, , Decimals and Percentages CSM 177, 182, 185, 188 [KEY] Compare and order fractions whose denominators are all multiples of the same number. [KEY] Read and write decimals numbers as fractions [for example, $0.71 = 71/100$]. [KEY] Read, write, order and compare numbers with up to three decimal places. [KEY] Solve problems which require knowing percentage and decimal equivalents of $1/2$, $1/4$, $1/5$, $2/5$, $4/5$ and those fractions with a denominator of a multiple of 10 or 25.		Consolidation based on Summer 2 Assessment Gaps	
	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.		Identify right angles and other multiples of 90 degrees Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Identify angles on a straight line and a turn 360° . Identify angles at a point and one whole turn (total 360°). [KEY] Draw given angles, and measure them in degrees ($^\circ$). Use the properties of rectangles to deduce related facts and find missing lengths and angles. [KEY] Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Identify 3D shapes including cubes and cuboids from 2d representations				[KEY] Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. [KEY] Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes.							

Key Learning		
- Extend their understanding of the number system and place value to include larger integers. - Develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio. - Develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. - Understand the language of algebra as a means for solving a variety of problems. - Classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them. - Read, spell and pronounce mathematical vocabulary correctly.		
Cultural Capital		
Opportunity to transfer mathematical knowledge, conceptual understanding and mathematical skills through Educational Visits Maths Outside the Classroom opportunities taken around the school grounds, especially geometry and measurement. By creating meaningful contexts for pupils to understand and apply their learning. By creating opportunities for pupils to solve a range of problems in real life and abstract contexts.		
Vocational Links		
Link Super 7 key figures where possible to maths/ science		
Essential Vocabulary		
thousand million negative numerals compare order addition subtraction difference graph timetable interpret axis factor product dividend divisor quotient perimeter area	factor product dividend divisor quotient fraction numerator denominator mixed number improper fraction decimal decimal fraction percentage tenths thousandths equivalent multiples division symbol denominator	decimal addition subtraction multiplication division edge vertex acute obtuse turn convert length weight capacity inch pound pint volume measure time

