Maths: Year 5 National Curriculum Programme of Study Statements
Number and place value
I can read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
I can count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
I can interpret negative numbers in context
I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
I can solve number problems and practical problems that involve all of the above
I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals
Number - Addition and subtraction
I can add and subtract whole numbers with more than 4 digits, including using formal written methods
I can add and subtract numbers mentally with increasingly large numbers
I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
I can solve addition and subtraction multi-step problems in contexts, deciding which methods to use and why
Number – Multiplication and division
I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
I know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
I can establish whether a number up to 100 is prime and recall prime numbers up to 19
I can multiply numbers up to 4 digits using a formal written method
I can multiply and divide numbers mentally drawing upon known facts
I can divide numbers up to 4 digits using the formal written method of short division and interpret remainders
I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
I can recognise and use square numbers and cube numbers and the notation for squared (^{2}) and cubed (^{3})
I can solve problems involving multiplication and division using knowledge of factors and multiples, squares and cubes
I can solve problems involving addition, subtraction, multiplication and division
I can solve problems involving multiplication and division, including scaling by simple fractions
Number – fractions (including decimals and percentages)
I can compare and order fractions whose denominators are all multiples of the same number
I can identify, name and write equivalent fractions of a given fraction
I can recognise mixed numbers and improper fractions and convert from one form to the other 2/5 + 4/5 = 6/5 = 1 1/5
I can add and subtract fractions with the same denominator and denominators that are multiples of the same number
I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
I can read and write decimal numbers as fractions for example, 0.71 = 71/100
I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
I can round decimals with two decimal places to the nearest whole number and to one decimal place
I can read, write, order and compare numbers with up to three decimal places
I can solve problems involving number up to three decimal places
I can recognise and understand the symbol (%) and write percentages as a fraction and decimal
I can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, 1/5 , 2/5 , 4/5

Measurement
I can convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)
I can understand and use approximate equivalences between metric and imperial units such as inches, pounds and pints
I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
I can calculate and compare the area of rectangles (including squares), using standard units, (cm^2) and (m^2) and estimate the area of irregular shapes
I can estimate volume and capacity
I can solve problems involving converting between units of time
I can use all four operations to solve problems involving measure
Geometry – properties of shapes
I can identify 3-D shapes, including cubes and other cuboids, from 2-D representations
I know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles
I can draw given angles, and measure them in degrees (°)
I can identify: angles at a point and one whole turn (total 360°) ; angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) and other multiples of 90°
Geometry – position and direction
I can identify, describe and represent the position of a shape following a reflection or translation
Statistics
I can solve comparison, sum and difference problems using information presented in a line graph
I can complete, read and interpret information in tables, including timetables