

Number and place value

- I can read, write, order and compare numbers to at least 1 000 000
- I can determine the value of each digit in numbers to at least 1 000 000
- I can count forwards in steps of powers of 10 for any given number up to 1 000 000
- I can count backwards in steps of powers of 10 for any given number up to 1 000 000
- I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero
- I can round any number up to 1 000 000 to the nearest 10
- I can round any number up to 1 000 000 to the nearest 100
- I can round any number up to 1 000 000 to the nearest 1000
- I can round any number up to 1 000 000 to the nearest 10 000
- I can round any number up to 1 000 000 to the nearest 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.

Addition and subtraction

- I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
- 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 operations and methods to use and why.

Multiplication and Division

- I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- I can 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 by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers
- I can multiply and divide numbers mentally drawing upon known facts
- I can 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
- I can multiply whole numbers and those involving decimals by 10, 100 and 1000
- I can 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 including using their knowledge of factors and multiples, squares and cubes
- I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

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, represented visually, including tenths and hundredths
- I can 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, $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$]
- 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 fraction [for example, $0.71 = 71/100$]
- I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents 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 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
- I can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $1/5$, $2/5$, $4/5$ and those fractions with a denominator of a multiple of 10 or 25