

Year 1

Count within 100, forwards and backwards, starting with any number.

Reason about the location of numbers to 20 within the linear number system, including comparing using $<$ $>$ and $=$.

Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.

Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.

Reason about the location of numbers to 20 within the linear number system, including comparing using $<$ $>$ and $=$.

Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.

Develop fluency in addition and subtraction facts within 10.

Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.

Year 2

Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.

Add and subtract across 10.

Secure fluency in addition and subtraction facts within 10, through continued practice.

Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number.

Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.

Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotative division).

Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties.

Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers.

Year 3

Secure fluency in addition and subtraction facts that bridge 10, through continued practice.

Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.

Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.

Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.

Add and subtract up to three-digit numbers using columnar methods.

Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.

Reason about the location of any fraction within 1 in the linear number system.

Draw polygons by joining marked points, and identify parallel and perpendicular sides.

Year 4

Add and subtract up to three-digit numbers using columnar methods.

Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning.

Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.

Recall multiplication and division facts up to 12×12 , and recognise products in multiplication tables as multiples of the corresponding number.

Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.

Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.

Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.

Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders.

Year 5

Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning.

Multiply any whole number with up to 4 digits by any one-digit number using a formal written method.

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.

Compare areas and calculate the area of rectangles (including squares) using standard units.

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.

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.

Convert between units of measure, including using common decimals and fractions.

Recall decimal fraction equivalents for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$ and $\frac{1}{10}$, and for multiples of these proper fractions.

Year 6

Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.

Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.

Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems.

Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.

Express fractions in a common denomination and use this to compare fractions that are similar in value.

Compare fractions with different denominators, including fractions greater than 1, using reasoning, and choose between reasoning and common denomination as a comparison strategy.

Solve problems involving ratio relationships.

Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.