

Maths Key end points – for end of year

Ready to progress criteria...

Year Three.
Number and Place Value
Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.
Recognise the place value of each digit in three-digit numbers, and compose and decompose three digit numbers using standard and non-standard partitioning.
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.
Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts
Number Facts.
Secure fluency in addition and subtraction facts that bridge 10, through continued practice.
Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number
Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).
Addition and Subtraction
Calculate complements to 100
Add and subtract up to three-digit numbers using columnar methods.
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.
Multiplication and Division.
Apply known multiplication and division facts to solve contextual problems with different structures
Fractions
Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts
Find unit fractions of quantities using known division facts (multiplication tables fluency
Reason about the location of any fraction within 1 in the linear number system
Add and subtract fractions with the same denominator, within 1.
Geometry
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.
Draw polygons by joining marked points, and identify parallel and perpendicular sides

Maths Key end points – for end of year

Ready to progress criteria...

Year Four
Number and Place Value
Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.
Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning
Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.
Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.
Number Facts
Recall multiplication and division facts up to 12×12 , and recognise products in multiplication tables as multiples of the corresponding number.
Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.
Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100).
Multiplication and Division
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.
Manipulate multiplication and division equations, understand and apply the commutative property of multiplication
Understand and apply the distributive property of multiplication.
Fractions
Reason about the location of mixed numbers in the linear number system.
Convert mixed numbers to improper fractions and vice versa.
Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.
Geometry
Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.
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.
Identify line symmetry in 2D shapes presented in different orientations.
Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.
Year Five

Maths Key end points – for end of year

Ready to progress criteria...

Number and Place value
Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01. Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.
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 non-standard partitioning.
Reason about the location of any number with up to 2 decimal places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each.
Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.
Convert between units of measure, including using common decimals and fractions.
Number Facts
Secure fluency in multiplication table facts, and corresponding division facts, through continued practice
Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).
Multiplication and Division
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.
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.
Fractions, Decimals and Percentages
Find non-unit fractions of quantities.
Find equivalent fractions and understand that they have the same value and the same position in the linear number system.
Recall decimal equivalents for $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$ and $\frac{1}{10}$, and for multiples of these proper fractions
Geometry
Compare angles, estimate and measure angles in degrees ($^{\circ}$) and draw angles of a given size.
Compare areas and calculate the area of rectangles (including squares) using standard units.

Maths Key end points – for end of year

Ready to progress criteria...

Year Six
Number and Place Value
Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10, 100 and 1,000).
Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning.
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.
Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts.
Addition, Subtraction, Multiplication and Division
Understand that 2 numbers can be related additively or multiplicatively, and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number).
Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverse relationships, and place-value understanding.
Solve problems involving ratio relationships.
Solve problems with 2 unknowns
Fractions, Decimals and Percentages.
Recognise when fractions can be simplified, and use common factors to simplify fractions.
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.
Geometry.
Draw, compose, and decompose shapes according to given properties, including dimensions, angles and area, and solve related problems