

Milestones

Year 1	Can count from one number to another number up to 100 e.g. can count from 13 to 18 or 37 to 43	Can identify the value of numbers to 20 and reason about their position on the empty number line using comparative language (more than, less than, fewer, least, most), symbols ($= < >$), and benchmarks (0, 5, 10, 15 and 20)	Knows that 10 ones is equal to 1 ten and can identify equality in teen numbers e.g. 15 ones = 1 ten and 5 ones	Can identify and describe wholes grouped into different parts including using symbols ($+ - =$)	Can use resources to model what is happening in a joining or separation problem and match representations showing these problems	Can regroup numbers within 10 and use these efficiently to make 10 and some more when adding e.g. $7+8 = 7+3+5$	Can find how many more/less from one number to another without having to count all (counting on/back or using number combinations)	Can recognise equal and unequal groups and can adjust groups to make them equal	Counts in 2s, 5s and 10s and knows that every time a number is said another group of 2, 5 or 10 has been added.	When exploring part, whole relationship can identify that there are two equal parts when the whole is halved.	Can find congruent shapes in new locations using their properties and recognising that some shapes have the same properties but look different.	Is developing spatial thinking and spatial language linked to position, direction and movement including turns
Year 2	Can count on and back in tens and describe the relationship of the number to the nearest multiples of 10	Can identify the value of numbers to 100 and reason about their position on the empty number line using comparative language (more than, less than, fewer, least, most), symbols ($= < >$), and benchmarks	Can recognise the place value of each digit in 2-digit numbers and can regroup these flexibly knowing that 10 ones is equal to 1 ten e.g. $34 = 30 + 4$ or $20+14$ or $10+24...$	Can identify and describe wholes grouped into equal parts including using symbols ($+ - \times \div =$) and linking to fraction notation for halves and quarters.	Can identify what is known and unknown within a problem and match representations showing 1 step additive problem solving	Can recall and use additive facts within 20 and use think 10 to add and subtract within 100 including using complements to reorder calculations	Can select effectively from a range of mental calculation strategies depending on the numbers involved and explain the method verbally, in pictures or using apparatus	Can describe multiplication ($\times 2, \times 5$ and $\times 10$) using language, arrays, repeated addition and multiplication symbol.	Can recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems including application to value of coins, demonstrating understanding of commutativity as necessary	Can recognise two structures of division – grouping and sharing - and can identify which structure is represented.	Can identify and describe the properties of 2D and 3D shapes using precise vocabulary including identifying 2D shapes within the faces of 3D shapes	Can order, arrange and describe positions of objects both in relation to other objects and within a pattern or sequence
Year 3	Can count on and back in tenths and find 10 or 100 more or less than a given number and describe the relationship of the number to the nearest multiples of 1, 10 and 100	Can identify the value of numbers to 1000 and reason about their position on the empty number line using comparative language (more than, less than, fewer, least, most), symbols ($= < >$), and benchmarks	Can recognise the place value of each digit in 3-digit numbers including values to one decimal place and can regroup these flexibly knowing that 10 tens is equal to 1 hundred and 10 tenths is equal to one.	Can manipulate part, whole models using our understanding of the relationship between parts and whole for additive reasoning showing knowledge of inverse and commutativity.	Can identify start, change and result in single step additive problems, knowing the impact.	Can apply additive facts to bridge through multiples of 10 – using complements to 100 and 60 (in relation to time).	Can understand and choose when to use formal written addition and subtraction strategies, checking reasonableness through estimation	Can identify number of groups, size of groups and relationships between these when finding the product or the quotient including finding fractions of a quantity.	Can use commutativity to support recall of facts and can use known facts as starting points rather than skip counting from zero.	Can identify the value of a fraction by the size of each part and can use this to compare and understand their position on a number line.	Can identify specific orientations of lines (vertical and horizontal) and can identify specific relationships of pairs of lines to one another (parallel and perpendicular) and can use these when describing properties of shape	Can recognise that angles are a property of shapes and a measure of turn relating fractions of a turn to right angles

Year 4	Can count on and back in tenths, hundredths and in powers of ten to 1000, and can round to the nearest 1, 10, 100 and 1000.	Continue to reason about positioning values beyond 1000 and before zero (negative numbers).	Can continue to develop understanding of the base-10 pattern of place value, knowing that 10 hundreds are equal to 1 thousand and 10 hundredths are equal to 1 tenth. This should include understanding fractional and decimal equivalence.	Can manipulate part, whole models using our understanding of the relationship between parts and whole for multiplicative reasoning including fractions.	Can connect a model, language and calculations to represent scaling problems and use it to solve the problem	Can use understanding of conservation related to sum and difference to rebalance calculations to make them more manageable (equal sum and equal difference)	Can understand and choose when to use formal written multiplication strategies, recognising the distributive law (regrouping) within them	Can explain and represent the multiplicative statement/structure in a range of contexts, including arrays, area, scaling and rate.	Can confidently apply knowledge of factor pairs and equivalence to use the associative (reordering) and distributive (regrouping) laws efficiently when calculating beyond known facts.	When adding and subtracting fractions with the same denominator, can recognise when passing through the whole (integers)	Can compare and classify polygons with three or four sides naming them correctly based on their properties	Can identify when a shape or pattern is symmetrical and, when given a line of symmetry, can reflect shapes and complete symmetrical figures or patterns.
Year 5	Can count on and back in steps of powers of 10 for any given number up to 1,000,000 and count fractions with a variety of denominators.	Can identify the value of each digit of numbers to 1,000,000 including numbers with three decimal places and can use a broad range of benchmarks to be able to order, compare and round including to one decimal place.	Can multiply and divide whole numbers and those involving decimals to two decimal places by 10, 100 and 1000 and can reason about the change in value.	Can manipulate part, whole models making wider connections in a wide range of number representations including: fractions, decimals, percentages, rates	Can independently create, use and make models and decisions about how to use them effectively for increasing complex, multi-step problems.	Can apply additive facts to bridge through integers (related to fraction and decimal understanding).	Can use understanding of the distributive law (regrouping the dividend) and knowledge of multiples of the divisor to support efficient division including application to the formal written method	Can apply multiplication and division and understanding of unitising to represent fractions where the denominators are multiples of the same number.	Can recognise square/ cubed/ prime numbers and their properties.	Can understand equivalence and relationship to the whole for fractions (including mixed numbers and improper fractions), decimals and percentages.	Can reason about shapes drawing on knowledge of shapes' properties to deduce facts about them, including the difference between regular and irregular shapes and can visualise 3D shapes from 2D representations.	Can draw, measure, compare and identify angles using knowledge of turns, lines and regular shapes.
Year 6	Can count on and back across zero and in a variety of different decimal and fractional steps	Can compare, order and round integers, decimals, percentages and fractions, including values >1	Can use regrouping numbers flexibly identifying the most appropriate regroup for the context of the calculation / problem including conversions by powers of 10 in a range of context including measures	Can manipulate part, whole models making wider connections continuing with a wide range of number representations including algebra	Can recognise relevant strands of their own knowledge and use this to model and solve problems, interpreting results appropriately given the context e.g. using the remainder to round appropriately.	Can recognise that a calculation can have more than one outcome and therefore the order of operations convention is needed.	Can apply understanding of multiplication and division to a broad range of values and representations (including decimals, fractions and 2-digit multipliers and divisors)	Can apply multiplication and division and understanding of unitising to convert and calculate with fractions where the denominators are varied and complex	Can use and apply knowledge of multiplication facts and scaling by powers of ten (including decimals) or any other unit to include scaling ratios	Can find a proportion of quantity when expressed in a variety of ways (fraction, percentages, decimals and proportions)	Can use knowledge of shapes and scaling to solve problems including finding unknown lengths, areas, volumes and angles	Can translate, reflect and describe positions on the full co-ordinate grid and knows that the shape doesn't change