



1c → 1b

- Count reliably up to 10 everyday objects
- Write numbers to 10, correctly most of the time
- Solve problems involving addition using numbers up to 10
- Solve problems involving subtraction using numbers to 10
- Find one more or one less than a number from 1 to 10
- Perform addition by using objects or a number line
- Take away using objects
- Order numbers up to 20
- Start to count on when adding
- Use everyday language to describe some properties of 3D shapes
- Use everyday language to describe some properties of 2D shapes
- Solve addition and subtraction problems with numbers up to 10

1b → 1a

- Read, write and order numbers to at least 20
- Understand the operation of addition and use the related vocabulary
- Understand the operation of subtraction and use the related vocabulary
- Add numbers when solving problems up to 10 objects in different contexts
- Subtract numbers when solving problems up to 10 objects in different contexts
- Begin to count on from numbers between 0 and 10
- Know addition facts to 5
- Compare numbers in the range 0 to 20 using the words more or less
- Say the number that is 1 or 10 more or less than any given number from 0 to 30
- Use everyday language to describe what 3D shapes look like and where they are
- Use everyday language to describe what 2D shapes look like and where they are
- Choose and use number operations and mental strategies that seem right to solve problems
- Know all pairs of numbers with a total of 10
- Find doubles and halves using numbers up to 5
- Count on and back in ones from any small number and in tens from and back to zero



1a → 2c

- Identify doubles and halves using numbers up to 10
- Use number facts to 10 to add two numbers mentally
- Use number facts to 10 to subtract two numbers mentally
- Extend counting to 30, 40, 50
- Count on or back in 2's and 5's to at least 30
- Begin to count in 10's to at least 50
- Count on in twos from zero, then from 1
- Read and write whole numbers bigger than 20
- Use mathematical names for some common 3D shapes and talk about their sides and corners e.g. cube, cuboid, sphere, cylinder, cone, pyramid
- Use mathematical names for some common 2D shapes and talk about their sides and corners e.g. square, triangle, circle, rectangle, quadrilateral
- Use mental strategies to solve problems set in 'real life', money or measurement contexts. (counting, addition, subtraction, doubling and halving)

2c → 2b

- Read and write whole numbers to 100
- Identify doubles and halves using numbers up to 20
- Begin to recognise and find one half and one quarter of fractions
- Recognise 1p, 2p, 5p, 10p, 20p and 50p coins and choose coins to make amounts up to 50p
- Understand place value in numbers up to 50
- Choose and use the appropriate number operation
- Choose a mental strategy to solve a problem
- Know addition and subtraction facts to 20
- Find a number which is 10 more than any given number
- Recognise £.p symbols
- Use mathematical names for some 2D shapes and identify some of their properties e.g. square, triangle, circle, rectangle, quadrilateral, semicircle



2b → 2a

- Order whole numbers to at least 100
- Explain the place value of each digit within a three digit number with help
- Count on and back to and from 100 in 1's and from 50 in 5's
- Use + - and = to record mental calculations
- Add 9 by adding 10 and subtracting 1
- Recall number facts to 10 and doubles to 20
- Give a number 1,2,5 and 10 more than a given number to 50
- Recognise $\frac{1}{2}$ a number of objects to 20 and $\frac{1}{4}$ of 4, 8 and 16
- Round numbers less than 100 to the nearest ten
- Use mathematical names for some common 2D shapes and identify some of their properties e.g. pentagon, hexagon, octagon
- Use mathematical names for some common 3D shapes and identify some of their properties such as number of faces, edges and corners
- Recognise odd and even numbers to at least 30

2a → 3c

- Know what each digit represents in a three digit number
- Express money in £ and p and begin to add, subtract and multiply with money
- Read, write and order whole numbers to 1000
- Recognise odd and even numbers to at least 100
- Add and subtract multiples of 10 mentally
- Say the number that is 1, 10 or 100 more or less than any given two or three digit number
- Add 2 digit numbers with a number line to help
- Know multiplication facts for the 2, 5 and 10x tables
- Subtract 1, 10 and 100 from 3 digit numbers
- Know that 1km=1000m, 1m=100cm, 1kg=1000g, 1l=1000ml
- Classify simple 2D and 3D shapes using their properties
- Recognise unit fractions such as $\frac{1}{2}$, $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{10}$



3c → 3b

- Know what each digit represents and partition 3 digit numbers into a multiple of 100, a multiple of 10 and ones (HTU)
- Order whole numbers to at least 1000 and position them on a number line
- Round any two digit number to the nearest 10 and any three digit number to the nearest 100
- Choose and use the appropriate number operation (including multiplication and division) to solve a problem
- Add and subtract mentally a multiple of 10 to or from a two-digit number
- Use knowledge of tables to help with division facts and recognise remainders
- Read and write whole numbers to at least 1000
- Count on and back in 1's, 10's and 100's
- Recognise unit fractions such as $\frac{1}{2}$, $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{10}$ and use them to find fractions of shapes and numbers
- Identify lines of symmetry in simple shapes and recognise shapes with no lines of symmetry
- Classify simple 2D and 3D shapes in various ways using their properties
- Know all addition and subtraction facts for each number to 20

3b → 3a

- Use mental recall of addition and subtraction facts to 20 in solving problems involving larger numbers
- Use all four operations to solve simple word problems involving numbers
- Solve number problems involving multiplication and division
- Begin to find remainders after division
- Recall division facts for 2, 5 and 10x tables
- Find $\frac{1}{2}$ of a number to 50, $\frac{1}{4}$ to 40 and $\frac{1}{3}$ to 30
- Recognise the equivalence of simple fractions, fractions equivalent to $\frac{1}{2}$, or $\frac{1}{4}$
- Read and write whole numbers to 9999
- Use symbols correctly including less than (<), greater than (>) and equals (=)
- Classify regular polygons using criteria such as number of right angles, regular sides and symmetry
- Convert between metric units e.g. $250\text{cm}=2.5\text{m}$, $2500\text{g}=2.5\text{kg}$
- Count on or back in tens or hundreds starting from any two or three digit number



3a → 4c

- Read and write whole numbers to 10000 and understand what each digit represents
- Know by heart multiplication facts for the 2, 3, 4, 5 and 10x tables
- Recall division facts for the 2, 3, 4, 5 and 10x tables
- Order simple fractions, e.g. decide whether fractions such as $\frac{3}{8}$ are greater or less than $\frac{1}{2}$
- Add and subtract decimals to one decimal place
- Round sums of money to the nearest pound
- Order decimals to 2 decimal places
- Round numbers to the nearest 10 and 100
- Classify polygons using criteria such as number of right angles, regular and symmetry
- Use all four operations to solve simple word problems involving numbers and simple quantities
- Find remainders after division
- Measure and calculate the perimeter of rectangles

4c → 4b

- Read and write whole numbers in figures and words and know what each digit represents, including decimals to one decimal place
- Multiply and divide any positive whole number up to 10000 by 10 or 100
- Order a given set of positive and negative integers
- Know by heart all multiplication facts up to 10×10
- Know square numbers to 100
- Add decimals to 2 places, sometimes using columns
- Use decimal notation for tenths and hundredths
- Order simple fractions with the same numerators and use the terms numerator and denominator
- Use a protractor to measure acute and obtuse angles to the nearest 5 degrees
- Use all four operations to solve simple word problems involving numbers and quantities
- Calculate mentally a difference such as $8006 - 2993$



4b → 4a

- Read and write whole numbers in figures and words and know what each digit represents, including decimals to two decimal places
- Use knowledge of place value to multiply and divide whole positive numbers by 10 or 100
- Use knowledge of tables to 10x10 and associated division facts to mentally solve number problems
- Count on or back in 10's, 100's, 1000's from any given number
- Round any integer up to 10000 to the nearest 10, 100 or 1000
- Round a number with one or two decimal places to the nearest integer
- Generate new tables from old e.g. 16 from 8
- Use a protractor to measure and draw acute and obtuse angles to the nearest 5 degrees
- Recognise perpendicular and parallel lines
- Use all four operations to solve simple word problems involving numbers and quantities (including time)
- Derive quickly: division facts corresponding to tables up to 10 x 10
- Understand and calculate area by using formula in words: length x breadth

4a → 5c

- Use knowledge of table facts to work mentally with TU by U
- Multiply and divide decimals mentally by 10 or 100
- Order negative numbers and find the difference between a positive and negative number using a number line
- Find fractions of numbers or quantities, eg 7/10 of 40
- Explain and record how a problem was solved using conventional notation and vocabulary
- Find a simple percentage of a whole number
- Calculate short multiplication involving decimals to 1 decimal place
- Express simple fractions such as 1/2, 1/4, 3/4, 1/3, 2/3, tenths and 100ths as %
- Recognise and extend number sequences
- Calculate the perimeter of regular shapes by measuring



5c → 5b

- Order a mixed set of numbers with up to three decimal places
- Round a number with two decimal places to the nearest tenth or to the nearest whole number
- Add and subtract a positive number to or from a negative number
- Order a set of positive and negative numbers
- Use simple formulae to solve problems
- Use column addition involving 2 decimal places
- Use a protractor to measure and draw acute and obtuse angles to the nearest degree
- Identify and use appropriate operations to solve word problems involving numbers and quantities
- Find simple percentages of small whole number quantities e.g. find 20% of £500
- Reduce fractions to their simplest form
- Extract and interpret graphs and diagrams including pie charts and draw conclusions about the data
- Calculate the area of rectangles using the formula

5b → 5a

- Order, add and subtract negative numbers
- Use all 4 operations with decimals to 2 places
- Solve problems involving ratio and proportion
- Reduce fractions to their simplest forms
- Construct and use simple formulae
- Interpret graphs and diagrams including pie charts and draw conclusions about the data
- Calculate the perimeter and area of simple compound shapes that can be split into rectangles
- Identify all symmetries of 2D shapes
- Use methods to successfully multiply any 3 digit number by any 2 digit number
- Use methods to successfully divide any 3 digit number by any 2 digit number



5a → 6c

- Choose and use appropriate calculation strategies to solve multi-step problems, and problems involving fractions, decimals and percentages
- Identify and record the steps or calculations needed to solve problems
- Explain and justify reasoning and conclusions using notation, symbols and diagrams
- Find the difference between a positive and negative integer
- Use decimal notation for tenths, hundredths and thousandths
- Round and order decimals with up to 3 places
- Express one quantity as a percentage of another
- Order a set of fractions by converting them to decimals
- Use knowledge of multiplication facts to derive quickly squares of numbers to 12×12
- Make and justify estimates and approximations to calculations
- Calculate mentally with integers and decimals $U.t \pm U.t$, $TU \times U$, $TU \div U$, $U.t \times U$, $U.t \div U$
- Express a quotient as a fraction or decimal (e.g. $67 \div 5 = 13.4$ or $13 \frac{2}{5}$)
- Estimate angles and use a protractor to measure and draw them
- Describe and interpret results and solutions to problems using the mode, range, median and mean