

Year 2 - Maths

Number - Place Value

To count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward

- I can count on or back in 10s from any number between 0 and 100
- I can count on or back in 2s from any number between 0 and 100
- I can count on or back in 5s from any number between 0 and 100
- I can count on or back in 3s from any number between 0 and 100
- I can identify a sequence which goes up or down in 2, 3, 5 or 10

To recognise the place value of each digit in a two-digit number

- I can recognise the 'tens' number in a 2-digit number
- I can partition a 2-digit number to show the value of each digit
- I can work out quickly what is 10 more than a given 2-digit number
- I can work out quickly which number comes before and after a given 2-digit number
- I can work out which numbers should and should not be in a sequence up to the value of 100

To compare and order numbers from 0 up to 100; use and = signs

- I can explain what the = symbol stands for
- I can explain what the > symbol stands for
- I can explain what the < symbol stands for
- I can use the = sign accurately in simple calculations
- I can use the > symbol between 2 numbers accurately
- I can use the < symbol between 2 numbers accurately

To read and write numbers to at least 100 in numerals and in words

- I can write all numbers between 0 and 10 in words and numbers
- I can write all ten numbers between 10 and 100 in words and numbers
- I can write all numbers between 0 and 50 accurately
- I can write all numbers between 50 and 100 accurately
- I can match numbers and words between 0 and 100 rapidly

To identify, represent and estimate numbers using different representations

- I can make numbers to 100 with objects
- I can position numbers to 100 on a number line
- I can represent numbers to 100 on a place value chart
- I can represent numbers to 100 on a number line
- I can represent numbers to 100 on a blank number line
- I can identify the two multiples of 10 a given number is between
- I can identify numbers on a number line
- I can estimate a position of a number on a number line when values are marked
- I can estimate a position of a number on a blank number line

To recall and use addition and subtraction facts to 20 fluently

- I can rapidly recall all your addition number bonds to 20
- I can rapidly recall all your subtraction number bonds to 20

To derive and use related facts up to 100

- I can rapidly add any two tens numbers to 100
- I can rapidly subtract any tens numbers from another to 100
- I can link addition number bonds to 20 to work out additions of tens numbers to 100
- I can link subtraction number bonds to 20 to work out subtraction of tens numbers to 100

To add and subtract numbers using concrete objects, pictorial representations, mental and written methods

- I can rapidly add any 2 one-digit number together
- I can rapidly subtract one-digit number from another
- I can subtract 10 from any one or two-digit numbers
- I can add rapidly any 3 one-digit numbers
- I can add a 10s number to any one or two-digit numbers
- I can subtract a 10s number from any two-digit numbers
- I can add a one-digit number to any two-digit number up to 20
- I can add a one-digit number to any two-digit number up to 50

To show that addition of two numbers can be done in any order and subtraction of one number from another cannot

- I can explain that when adding you can start with any number
- I can explain that when subtracting you must always take the smaller number from the larger one
- I can complete a subtraction problem requiring you to 'takeaway' one number from another
- I can complete a subtraction problem requiring you to find the difference in value between two numbers
- I can show understanding that in the calculation ' $a + b = c$ '; that $c - a = b$ and $c - b = a$

To recognise and use the inverse to check calculations and solve missing number problems

- I can show understanding that in the calculation ' $a + b = c$ '; that $c - a = b$ and $c - b = a$
- I can explain and show that when adding you can start with any number
- I can explain and show that when subtracting you must always take the smaller number from the larger one
- I can explain and show that when given 3 numbers you can create 4 number sentences for addition and subtraction
- I can explain what the term 'inverse' means and describe it to someone else

To recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables

- I can recite the 2x table rapidly, up to x12, without error
- I can answer rapidly any calculation involving the 2x table out of order
- I can understand the inverse rule
- I can recite the 10x table rapidly, up to x12, without error
- I can recognise that $\times 2$ is doubling
- I can recognise that $\div 2$ is halving
- I can answer rapidly any calculation involving the 10x table out of order
- I can recite the 5x table rapidly, up to x12, without error
- I can answer rapidly any calculation involving the 5x table out of order

To calculate mathematical statements for multiplication and division

- I can recognise that the 'x' sign stands for multiplication
- I can recognise that the \div sign stands for division
- I can use the \times , \div , and $=$ signs in simple calculations for numbers up to 100
- I can solve word problems for multiplication using the multiples of 2, 5 and 10
- I can solve word problems for division using the multiples of 2, 5 and 10

To show that multiplication of two numbers can be done in any order and division of one number by another cannot

- I can calculate and write out simple multiplication statements
- I can calculate and write simple division statements
- I can apply the inverse rule to multiplication questions
- I can apply the inverse use to division questions
- I can explain the term commutative

To solve problems involving multiplication and division

- I can solve problems in context using objects
- I can solve problems in context using repeated addition
- I can solve problems in context using arrays
- I can solve problems in context using mental methods
- I can solve problems in context using multiplication and division facts

To recognise, find, name and write fractions $1/3$, $1/4$, $3/4$ of a length, shape, set of objects or quantity

- I can identify that the symbol $1/2$ stands for half the value of a number or object
- I can identify that the symbol $1/4$ stands for a quarter of the value of a number or object
- I can identify that the symbol $1/3$ stands for a third of the value of a number or object
- I can identify that the symbol $3/4$ stands for three-quarters of the value of a number or object
- I can identify that the symbol $2/3$ stands for two-thirds of the value of a number or object
- I can calculate $1/2$ of a given number up to 100
- I can calculate $1/4$ of a given number up to 100
- I can calculate $3/4$ of a given number up to 100
- I can calculate $1/3$ of a given number up to 100
- I can calculate $2/3$ of a given number up to 100

To write simple fractions and recognise the equivalence

- I can show understanding that the symbol $1/2$ stands for half the value of a number or object
- I can show understanding that the symbol $1/3$ stands for a third of the value of a number or object
- I can show understanding that the symbol $1/4$ stands for a quarter of the value of a number or object
- I can show understanding that the symbol $3/4$ stands for a three-quarters of the value of a number or object
- I can show understanding that the symbol $2/3$ stands for two-thirds of the value of a number or object
- I can recognise a $1/2$ as $2/4$ or $3/6$, etc.
- I can recognise a $1/3$ as $2/6$ or $3/9$, etc.
- I can recognise a $1/4$ as $2/8$ or $4/16$, etc.
- I can calculate $1/2$, $1/4$, $1/3$ or $3/4$ of a given number up to 100

To choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm)

- I can name objects that are more or less than a metre long or high
- I can explain how long a centimetre is
- I can read lengths to the nearest centimetre
- I can use a ruler to measure 5cm, 10cm, 20cm and 30cm accurately
- I can order different lengths using metres and centimetres
- I can recognise mm as a very small amount and that 10mm makes 1 cm

To choose and use appropriate standard units to estimate and measure mass (kg/g)

- I can name objects that are more or less than a Kg in weight
- I can read weighing scales to the nearest 10 gram units
- I can order different weights using kilograms and grams

To choose and use appropriate standard units to estimate and measure capacity (litres/ml)

- I can name objects that are more or less than a litre
- I can recognise how much 1 litre is
- I can name liquids which are sold in 1 litre
- I can order different capacities using litres and millilitres

To choose and use appropriate standard units to estimate and measure temperature (°C)

- I can explain that 0°C is the freezing point of water
- I can explain that 100°C is the boiling point of water
- I can estimate the temperature outside

To compare and order lengths and record the results using >, < and =

- I can recall that lengths are measured in metres
- I can estimate how much 1 metre is
- I can recall that lengths are measured in metres and cm
- I can use the signs >, < and = accurately
- I can use the three signs >, < and = when recording findings about length

To compare and order mass and record the results using >, < and =

- I can recall that weight and mass are measured in kg
- I can estimate how much an item weighing 1Kg would be
- I can recall that the weight and mass are measured in kg and g
- I can use the signs >, < and = accurately
- I can use the three signs >, < and = when recording findings about weight

To compare and order volume/capacity and record the results using >, < and =

- I can recall that liquids are measured in litres and ml
- I can recall that 1000ml are the same as 1 litre
- I can name a number of items we buy that are sold in litres or ml
- I can use the signs >, < and = accurately
- I can fill a measuring jug to a given amount in litres or ml

To recognise and use symbols for pounds (£) and pence (p)

- I can recognise all coins and notes up to £10

To combine amounts to make a particular value

- I can know how many 10p; 20p and 50p coins you need to make £1
- I can pay for an item up to £5 and present the correct amount of money
- I can find more than one way of paying for any amount up to £5
- I can work out how much change I will get from any item up to £5

To find different combinations of coins that equal the same amounts of money

- I can recognise all coins between 1p and £2
- I can show understanding of know how many 50p; 20p; 10; 5p; 2p and 1p coins you need to make up to £1

To solve simple practical problems involving addition and subtraction of money

- I can show confidence to give change from any amount up to £1
- I can add any two amounts of money up to the value of £2
- I can subtract one amount of money from another up to the value of £2

To compare and sequence intervals of time

- I can sequence events in a given day
- I can order a given number of time events to the given hour or half an hour
- I can work out longest and shortest interval of times to the given hour

To tell and write the time to five minutes

- I can tell the time to o'clock
- I can tell the time to half past the hour
- I can tell the time to quarter past the hour
- I can tell the time to quarter to the hour
- I can draw times on clock faces to the intervals of o'clock, half past, quarter past and quarter to the hour
- I can read the clock in five minute intervals past the hour
- I can read the clock to five minute intervals to the hour
- I can tell what the time will be five minutes later or what the time was five minutes earlier

To know the number of minutes in an hour and the number of hours in a day

- I can recall that there are 60 minutes in an hour
- I can recall that there are 24 hours in a day

To identify and describe the properties of 2-D shapes

- I can identify a line of symmetry in simple shapes
- I can make up a symmetrical shape
- I can identify 2-D shapes according to sides and number of vertices

To identify and describe the properties of 3-D shapes

- I can identify simple 3-D shapes according to sides, vertices and faces
- I can use the terms 'vertices' and 'faces' when describing 3D shapes?

To identify 2-D shapes on the surface of 3-D shapes

- I can identify and name the common 2D shapes: circle, triangle, rectangle and square
- I can identify and name the common 3D shapes: cube, cuboid, square-based pyramid; triangular-based pyramid, sphere and cylinder
- I can identify the 2D shapes that make up: cube, cuboid, square-based pyramid; triangular-based pyramid, sphere and cylinder
- I can identify the 3D shapes: cube, cuboid, square-based pyramid; triangular-based pyramid, sphere and cylinder in the indoor and outdoor environment
- I can appreciate why certain shapes are used for everyday things, e.g. bricks for building walls

To compare and sort common 2-D and 3-D shapes and everyday objects

- I can compare common 2D shapes: circle, triangle, rectangle and square
- I can compare common 3D shapes: cube, cuboid, square-based pyramid; triangular-based pyramid, sphere and cylinder
- I can sort 2D shapes by their properties
- I can sort 3D shapes by their properties
- I can sort everyday objects by their 2D and 3D properties

To order and arrange combinations of objects in patterns and sequences

- I can continue a repeated pattern that has one attribute
- I can create my own repeated pattern with one attribute
- I can continue a repeated pattern that has two attributes
- I can create my own repeated pattern that has two attributes
- I can use items found in the natural environment to create my own repeated patterns

To use mathematical vocabulary to describe position, direction and movement

- I can show knowledge and understanding of the term 'clockwise' movement
- I can show knowledge and understanding of the term 'anti-clockwise' movement
- I can work out what a quarter, half and three quarter turn looks like
- I can combine turns with clockwise and anti-clockwise movements
- I can recognise right angles in the environment, both indoor and outdoor
- I can appreciate why right angles are useful for buildings

To interpret and construct simple pictograms, tally charts, block diagrams and simple tables

- I can construct a simple table to show information collected
- I can construct a block diagram to show information collected
- I can construct a tally chart to show information collected
- I can construct a pictogram to show information collected
- I can read information contained within a simple table
- I can read information contained within a block diagram
- I can read information contained within a simple tally chart
- I can read information contained within a pictogram

To ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

- I can read information contained within a simple table
- I can read information contained within a block diagram
- I can read information contained within a simple tally chart
- I can keep a record of a survey by using a tally chart
- I can construct a simple table to show information collected
- I can construct a block diagram to show information collected

To ask and answer questions about totalling and comparing categorical data

- I can read information contained within a simple table
- I can read information contained within a block diagram
- I can read information contained within a simple tally chart
- I can keep a record of a survey by using a tally chart
- I can construct a simple table to show information collected
- I can construct a block diagram to show information collected