## Number - Place Value

To count from 0 in multiples of $4,8,50$ and 100

- I can count on and back in 100 s from 0 to 1000
- I can count on and back in 10s from 0 to 100
- I can count on and back in 50 s from 0 to 1000
- I can count on and back in 3 s from 0 to 99
- I can count on and back in 4 s from 0 to 100
- I can count on and back in 8 s from 0 to 96
- I can find 10 or 100 more or less than a given number

To find 10 or 100 more or less than a given number

- I can count on and back in 100s from 0 to 1000
- I can count on and back in 10 s from 0 to 100
- I can count on and back in 10 s from any given number between 0 and 1000
- I can find 10 or 100 more or less than a given number

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

- I can explain and use terms: ones; tens and hundreds correctly
- I can partition any number up to 999 showing the value of each digit

To compare and order numbers up to 1000
I can demonstrate which of two 3-digit numbers is the greater and smaller
I can order a set of 3-digit numbers from smallest to largest
I can order a set of 3-digit numbers from largest to smallest
To identify, represent and estimate numbers using different representations

- I can know and use term: ones, tens, and hundreds correctly
- I can identify the value of each digit using ones, tens and hundreds
- I can represent the values; ones, tens and hundreds in various ways
- I can estimate values up to 1000

To read and write numbers up to 1000 in numerals and in words

- I can read and write all numbers to 100
- I can read write a;; umbers in 100s from 1001000
- I can read and write all numbers in 50s from 50 to 1000
- I can read and write all numbers in 10 s from 10 to 1000
- I can read and write all numbers to the value of 1000


## Year 3 - Maths

## Number - Addition \& Subtraction

## To add and subtract numbers mentally

- I can add rapidly any 2 single-digit numbers
- I can subtract rapidly any 2 single-digit number
- I can add together mentally any single-digit and any 2-digit number
- I can subtract any single-digit number from a 2 -digit number
- I can add together mentally any single-digit and any 3-digit number
- I can subtract any single-digit number from a 3 -digit number
- I can add together mentally any 10 s number and any 3 -digit number
- I can subtract any 10 s number from a 3 -digit number
- I can add together mentally any 100 s number and any 3 -digit number
- I can subtract any 100 s number from a 3 -digit number

To add numbers with up to three digits, using formal written methods

- I can add 2 numbers with 3 -digits together using columnar addition without exchange between the ones and tens
- I can add 2 numbers with 3 -digits together using columnar addition, where the ones and tens when added make more than 10
- I can add 3 numbers with 3 -digits using columnar addition where the ones or tens make more than 10

To subtract numbers with up to three digits, using formal written methods

- I can subtract a 3-digit number from another using columnar subtraction which requires no exchange between the ones, tens or hundreds
- I can subtract a 3-digit number from another using columnar subtraction which requires exchange between the ones, tens or hundreds
- I can subtract a 3-digit from another, using columnar subtraction where the value of the tens is 0

To estimate the answer to a calculation and use inverse operations to check answers

- I can explain what is meant by the term 'estimate'
- I can explain what is meant by the term 'inverse'
- I can give an example of inverse rule as it relates to addition and subtraction
- I can estimate what the answer might be to a given addition or subtraction calculation
- I can round numbers to the nearest 10 in order to make an estimation more accurate

To solve problems, including missing number problems involving addition and subtraction

- I can read an addition or subtraction problem through carefully before trying to solve it
- I can explain what is involved in the word problem before trying to solve it
- I can solve addition and subtraction problems which have missing numbers
- I can solve addition and subtraction problems when logical thinking is required
- I can solve addition and subtraction problems when a range of starting points is possible
- I can solve addition and subtraction problems when missing information is involved


## Number - Multiplication \& Division

To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

- I can recite all multiplication facts for the $\times 2$ table
- I can recite all multiplication facts for the $\times 5$ table
- I can recite all multiplication facts for the $\times 10$ table
- I can recite all multiplication facts for the $\times 3$ table
- I can recite all multiplication facts for the $\times 4$ table
- I can recite all multiplication facts for the $x 8$ table
- I can show understanding of the inverse of all table facts involving 2, 3, 4, 5, 8 and $10 x$ table
- I can recall all number facts for the $2,3,4,5,8$ and $10 x$ table out of sequence

To write and calculate mathematical statements for multiplication

- I can multiply a 10 s number by a single-digit number mentally, using 2, 3, 4, 5, 8 and 10
- I can see the relationship between the original number and the answer when multiplying by 10
- I can multiply a 2 -digit number by $2,3,5$ and $10 x$
- I can multiply a 2 -digit number by 4 , and $8 x$

To write and calculate mathematical statements for division

- I can divide a 10 s number by a single-digit number mentally, using 2, 3, 4, 5, 8 and $10 x$
- I can see the relationship between the original number and the answer when dividing by 10
- I can divide a 2 -digit number by 2,3,5 and 10x (without reminder)
- I can divide a 2 -digit number by 4 , and $8 \times$ without remainders

To solve problems, including missing number problems, involving multiplication and division

- I can read a multiplication or division problem through carefully before trying to solve it
- I can explain what is involved in the word problem before trying to solve it
- I can solve multiplication and division problems which have missing numbers
- I can solve multiplication and division problems when logical thinking is required
- I can solve multiplication and division problems when a range of starting points is possible
- I can solve multiplication and division problems when missing information is involved


## Year 3 - Maths

## Number - Fractions

## To count up and down in tenths

- I can explain that $1 / 10$ of a number is the same as dividing by 10
- I can count up in $1 / 10$ starting from any tenth number smaller than 1
- I can count back in $1 / 10$ starting from any tenth number smaller than 1
- I can recognise $5 / 10$ as being the same as $\frac{1}{2}$
- I can count on in tenths from any given tenth number up to 5
- I can count on in tenths from any given tenth number up to 5
- I can count on in tenths from any given tenth number up to 5

To recognise that tenths occur when dividing an object into 10 equal parts and/or dividing a one-digit number or quantities by 10

- I can divide an object into 10 equal parts
- I can divide a one-digit number by 10
- I can divide a given quantity by 10

To recognise, find and write fractions of a discrete set of objects

- I can shade in $\frac{1}{4}, \frac{1}{2}$, and $\frac{3}{4}$ of a given regular shape
- I can appreciate that $\frac{1}{2}$ is the same as $2 / 4 ; 3 / 6$; etc.
- I can know that a unit fraction shows one part of the value of the denominator, e.g. $1 / 5$ this one part of five
- I can know the difference between a unit and a non-unit fraction
- I can place unit fractions in order according to value
- I can solve problems involving unit fractions


## To recognise and use fractions as numbers

- I can identify how many equal parts the number line has been split into
- I cam count up in fraction steps from a whole number on the left of the number line
- I can identify the denominator
- I can use the denominator to split the number line up into equal parts
- I can count up in fraction steps from the whole number on the left of a blank number line

To recognise and show, using diagrams, equivalent fractions with small denominators

- I can shade in $\frac{1}{4}, \frac{1}{2}$, and $\frac{3}{4}$ of a given regular shape
- I can appreciate that $\frac{1}{2}$ is the same as $2 / 4 ; 3 / 6$; etc.
- I can know that a unit fraction shows one part of the value of the denominator, e.g. $1 / 5$ this one part of five
- I can know the difference between a unit and a non-unit fraction
- I can place unit fractions in order according to value
- I can solve problems involving unit fractions

To add and subtract fractions with the same denominator within one whole

- I can explain and use the term 'denominator' and understand its relevance in a fraction
- I can appreciate that 2 halves and four quarters make up one whole
- I can appreciate that eight eighths and ten tenths makes up one whole
- I can add 2 fractions with the same denominator that add up to no more than 1 whole
- I can subtract one fraction from another of the same denominator

To compare and order unit fractions, and fractions with the same denominator

- I can shade in $\frac{1}{4}, \frac{1}{2}$, and $\frac{3}{4}$ of a given regular shape
- I can appreciate that $\frac{1}{2}$ is the same as $2 / 4 t h ; 3 / 6 t h ;$ etc.
- I can show understanding that a unit fraction shows one part of the value of the denominator, e.g. 1/5 this one part of five
- I can explain the difference between a unit and a non-unit fraction
- I can place unit fractions in order according to value
- I can solve problems involving unit fractions


## Year 3 - Maths

## Measures

To measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ): mass ( $\mathrm{kg} / \mathrm{g}$ ); volumel capacity ( $1 / \mathrm{ml}$ )

- I can practise using appropriate tools to measure distances and weight
- I can recognise 1 m as having 100 cm and know that 50 cm is $\frac{1}{2}$ a metre
- I can measure to the nearest metre a distance of up to 10 m
- I can measure accurately a distance of up to 30 cm using a ruler
- I can measure a distance of up to 5 m using a tape measure giving the answer in m and cm
- I can recognise 1 Kg as having 1000 g and know that 500 g is $\frac{1}{2}$ a Kg
- I can measure a weight of up to 5 Kg using scales giving the answer in Kg and $g$
- I can show understanding of how many ml makes up 1 litre

To add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ): mass ( $\mathrm{kg} / \mathrm{g}$ ); volume/capacity ( $1 / \mathrm{ml}$ )

- I can add weights, lengths or capacity together, with 3-digits, using columnar addition without exchange between the ones and tens
- I can add weights, lengths or capacity together, with 3-digits, using columnar addition, where the ones and tens when added make more than 10
- I can subtract weights, lengths or capacity, involving 3-digits, from one another, using columnar subtraction which requires no exchange between the ones, tens or hundreds
- I can subtract weights, lengths or capacity, involving 3-digits, from one another, using columnar subtraction which requires exchange between the ones, tens or hundreds
- I can subtract weights, lengths or capacity, involving3-digits, from another, using columnar subtraction where the value of the tens is 0
- I can add or subtract weights, lengths and capacity measures which involve up to 3-digits but set out as word problems or as reasoning and thinking problems

To measure the perimeter of simple 2-D shapes

- I can explain the term 'perimeter'
- I can explain that the perimeter is the distance around the four sides of a rectangle
- I can explain that the perimeter is the distance around the outside of any shape
- I can measure accurately each side of a 2D shape and add up all the sides to find the perimeter
- I can explain how to calculate the perimeter of a square or a rectangle

To add and subtract amounts of money to give change, using both $£$ and $p$ in practical contexts

- I can recognise all coins and notes between $1 p$ and $£ 10$
- I can sort money into like sets to make it easy for counting
- I can give change from a $£ 1$ for any amount costing less than a $£ 1$
- I can give change from a $£ 5$ for any amount that costs less than $£ 5$
- I can give change from a $£ 10$ for any amount that costs less than $£ 10$
- I can add any two amounts of money up to $£ 10$ in value
- I can solve word problems involving money where the amounts do not exceed $£ 10$

To tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks

- I can tell the time to o'clock; half past the hour and quarter past and to the hour
- I can tell the time to five past; ten past; twenty past and twenty-five past the hour
- I can tell the time to twenty-five to; twenty to; ten to and five to the hour
- I can read all Roman numerals between 1 and 12 (1 and X11)
- I can tell the time to the nearest minute, either past or to the hour
- I can tell the time to the nearest five minutes when the hand is not exactly on a number


## Year 3 - Maths

## Measures

To estimate and read time to the nearest minute

- I can explain that the term 'am' represents time from midnight to noon
- I can explain that the term 'pm' represents time from noon to midnight
- I can demonstrate that 60 seconds is one minute and that 60 minutes is one hour
- I can demonstrate that quarter past is 15 minutes past; and that half past is 30 minutes past
- I can show a given time on an analogue clock face
- I can convert an 'am' time to the digital 24 hour system
- I can convert a 'pm' time to the digital 24 hour system
- I can record a given time as am or pm

To know the number of seconds in a minute and the number of days in each month, year and leap year

- I can recall how many seconds make up one minute
- I can recall how many minutes make up one hour
- I can recall the months of the year and their order
- I can recall how many days are in each month
- I can recall how many days are in a year
- I can explain what is meant by the term 'leap year'
- I can recall how any days are in a leap year
- I can work out how many minutes or hours have elapsed between two given times

To compare durations of events

- I can find the difference between two events by counting on


## Year 3-Maths <br> Geometry - Shape

## To draw 2-D shapes and name them

- I can use the terms: triangle; square; rectangle; circle and semi-circle accurately
- I can draw a square with a given dimension accurately
- I can draw a rectangle with given dimensions accurately
- I can draw a triangle with a given dimension accurately
- I can draw a triangle with a right angle
- I can use a compass appropriately
- I can draw circles with a compass and know the term radius
- I can draw circles that have a radius of $5 \mathrm{~cm} ; 10 \mathrm{~cm} ; 20 \mathrm{~cm}$;


## To make 3-D shapes using modelling materials

To recognise 3-D shapes in different orientations and describe them

- I can recognise and name all the regular 2D shapes: square; rectangle; circle; triangle and semi-circle
- I can recognise and name the following 3D shapes: cube; cuboid; sphere; cone; cylinder; square-based pyramid; triangular-based pyramid
- I can recognise what the net of the following shapes look like: cube; cuboid; cylinder; square-based pyramid; and, triangular-based pyramid
- I can see what different 3D shapes are used for in everyday life

To recognise angles as a property of shape or a description of a turn

- I can explain that the opening between two lines joined at a point is known as an angle and can be measured in degrees
- I can explain that the measurement in degrees is greater when the opening is wider
- I can recognise right angles in the environment and recognise their importance
- I can recognise a right angle has 90 degrees which is written as $90^{\circ}$
- I can recognise that two right angles make a straight line and is equivalent to $180^{\circ}$ or can also be described as half a turn
- I can identify that 4 right angles is a full turn
- I can show understand that the measurement in degrees is greater when the opening is wider

To identify and recognise right angles

- I can explain that the opening between two lines joined at a point is known as an angle and can be measured in degrees
- I can explain that the measurement in degrees is greater when the opening is wider
- I can recognise right angles in the environment and recognise their importance
- I can recognise a right angle has 90 degrees which is written as $90^{\circ}$
- I can recognise that two right angles make a straight line and is equivalent to $180^{\circ}$ or can also be described as half a turn
- I can identify that 4 right angles is a full turn
- I can show understand that the measurement in degrees is greater when the opening is wider

To identify horizontal and vertical lines and pairs of perpendicular and parallel lines

- I can explain the terms: horizontal and vertical
- I can recognise horizontal and vertical in everyday situations
- I can show the relationship between horizontal and horizon
- I can explain the term perpendicular and parallel
- I can draw lines that are perpendicular and parallel to a given line


## Year 3 - Maths

## Statistic

To interpret and present data using bar charts, pictograms and tables

- I can read information set out in a bar chart or pictogram
- I can read information from a bar chart that has a scale on the vertical axes
- I can read information that has been set out within a table
- I can present information on a pictogram or bar chart
- I can present information on a bar chart where there is a scale on the vertical axes
- I can present information in the form of a table that helps the reader gain access to information rapidly

To solve one-step and two-step questions using information presented in scaled bar charts and pictograms and tables

- I can understand how a pictogram works
- I can read information from a pictogram even when it is scaled
- I can recognise the difference between a bar chart and a pictogram
- I can read information from a bar chart, even when it is scaled
- I can create questions in relation to the information given on a bar chart
- I can solve 'How many more' or 'How many fewer' type questions in relation to a bar chart or a pictogram

