Year 3 - Maths Number - Place Value To count from 0 in multiples of 4, 8, 50 and 100 I can count on and back in 100s from 0 to 1000 I can count on and back in 10s from 0 to 100 I can count on and back in 50s from 0 to 1000 I can count on and back in 3s from 0 to 99 I can count on and back in 4s from 0 to 100 I can count on and back in 8s 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 10s from 0 to 100 I can count on and back in 10s 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 100 1000 I can read and write all numbers in 50s from 50 to 1000 I can read and write all numbers in 10s from 10 to 1000 I can read and write all numbers to the value of 1000

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 10s number and any 3-digit number
- I can subtract any 10s number from a 3-digit number
- I can add together mentally any 100s number and any 3-digit number
- I can subtract any 100s 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 x2 table
- I can recite all multiplication facts for the x5 table
- I can recite all multiplication facts for the x10 table
- I can recite all multiplication facts for the x3 table
- I can recite all multiplication facts for the x4 table
- I can recite all multiplication facts for the x8 table
- I can show understanding of the inverse of all table facts involving 2, 3, 4, 5, 8 and 10x table
- I can recall all number facts for the 2, 3, 4, 5, 8 and 10x table out of sequence

To write and calculate mathematical statements for multiplication

- I can multiply a 10s 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 10x
- I can multiply a 2-digit number by 4, and 8x

To write and calculate mathematical statements for division

- I can divide a 10s number by a single-digit number mentally, using 2, 3, 4, 5, 8 and 10x
- 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 8x 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

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 $\frac{2}{4}$ th; $\frac{3}{6}$ th; 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

Measures

To measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/ capacity (l/ml)

- I can practise using appropriate tools to measure distances and weight
- I can recognise 1m as having 100cm and know that 50cm is $\frac{1}{2}$ a metre
- I can measure to the nearest metre a distance of up to 10m
- I can measure accurately a distance of up to 30cm using a ruler
- I can measure a distance of up to 5m using a tape measure giving the answer in m and cm
- I can recognise 1Kg as having 1000g and know that 500g is $\frac{1}{2}$ a Kg
- I can measure a weight of up to 5Kg 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 (m/cm/mm); mass (kg/g); volume/capacity (l/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 ${\tt \pounds}$ and p in practical contexts

- I can recognise all coins and notes between 1p 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

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

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 5cm; 10cm; 20cm;

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°
- I can recognise that two right angles make a straight line and is equivalent to 180° 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°
- I can recognise that two right angles make a straight line and is equivalent to 180° 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

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