## Number- addition and subtraction

- add and subtract numbers mentally, including:
- a three-digit number and ones
- a three-digit number and tens
- a three-digit number and hundreds
- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers
- solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.


## Measurement

- measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ); mass (kg/g); volume/capacity (l/ml)
- measure the perimeter of simple 2-D shapes
- add and subtract amounts of money to give change, using both f and p in practical contexts
- tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12 -hour and 24 -hour clocks
- estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
- know the number of seconds in a minute and the number of days in each month, year and leap year
- compare durations of events [for example to calculate the time taken by particular events or tasks]


## Geometry-properties of shape

- draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
-     - recognise angles as a property of shape or a description of a turn
-     - identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
-     - identify horizontal and vertical lines and pairs of perpendicular and parallel lines.


## Statistics

- Pupils should be taught to:
- . interpret and present data using bar charts, pictograms and tables
-     - solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.


## End of Year Expectations Mathematics <br> Year 3

## Number- number and place value

- count from 0 in multiples of $4,8,50$ and 100 ;
find 10 or 100 more or less than a given number
- recognise the place value of each digit in a three-digit number
(hundreds, tens, ones)
- compare and order numbers up to 1000
- identify, represent and estimate numbers using
different representations
- read and write numbers up to 1000 in numerals and in words
- solve number problems and practical problems involving
these ideas.


## Number- fractions

- count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
- recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators
- recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
- recognise and show, using diagrams, equivalent fractions with small denominators
- add and subtract fractions with the same denominator within one whole [for example, $+=]$
- compare and order unit fractions, and fractions with the same denominators
- Solve problems that involve all of the above.


## Number- multiplication and division

- recall and use multiplication and division facts for the 3,4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
- solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which $n$ objects are connected to m objects.

