| Autumn |
| :--- |
| Spine 1 |
| $\frac{\text { Numbers and place value }}{}$ count from 0 in multiples of 4, 8,50 and 100; find 10 or 100 more or less | count from 0 in mul

- 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.


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


## Spine 2

## 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

Multiplication and Division

- 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 problem sand correspondence problems in which nobjects are connected to $m$ objects.


## Statistics

- 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.


## Measurement - height and length

- measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ) ;


## Geometry - properties of shapes and perimeter

- 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
- identify whether angles are greater than or less than a right angle
- identify horizontal and vertical lines and pairs of perpendicular and parallel lines
- measure the perimeter of simple 2-D shapes*


## Spine 3

## Fractions, decimals and percentages

- 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 non-unit 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,
$\frac{5}{7}+\frac{1}{7}=\frac{6}{7}$
- compare and order unit fractions, and fractions with the same denominators
- solve problems that involve all of the above.

Summer

## Measurement - time

- 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 - angles and turns

- recognise angles as 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
Measurement - mass and capacity
- measure, compare, add and subtract: mass (kg/g); volume/capacity ( $1 / \mathrm{ml}$ )

