## Year 3 Medium Term Planning Autumn 1

Reading, writing and ordering two- and three-digit numbers

- To recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- To compare and order numbers up to 1000.
- To read and write numbers up to 1000 in numerals and in words

Counting and estimating

- To count from 0 in multiples of $4,8,50$ and 100 ; finding 10 or 100 more or less than a given number. - To identify, represent and estimate numbers using different representations.

Number facts to 20 and to 100 Addition and Subtraction of 1 and 2-digit numbers

- To add and subtract numbers mentally, including:
- a three-digit number and ones
- a three-digit number and tens
- a three-digit number and hundreds.
- To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

Multiplication and division facts

- To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
- To 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.
- To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which $n$ objects are connected to $m$ objects. Measuring using $\mathrm{mm}, \mathrm{cm}$ and metres
- To measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); volume/capacity $(\mathrm{l} / \mathrm{ml})$.
- To measure the perimeter of simple 2D shapes.

Recognising, describing and making 2D and 3D shapes

- To draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them with increasing accuracy
- To identify horizontal, vertical, perpendicular and parallel lines in relation to other lines


## Year 3 Medium Term Planning Autumn 2

## Counting and estimating

- To add and subtract numbers mentally, including:
- a three-digit number and ones
- a three-digit number and tens
- a three-digit number and hundreds.
- To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Addition and subtraction of two- and three-digit numbers, using a number line and columns
- To add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction.
- To estimate the answer to a calculation and use inverse operations to check answers.
- To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Multiplication and division: doubling, halving and TU $\times \mathrm{U}$
- To recall and use multiplication and division facts for the 3,4 and 8 multiplication tables.
- To 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.
- To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which $n$ objects are connected to mobjects.
Fractions: representing, comparing and ordering unit fractions of shapes and numbers
- To recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators.
- To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
- To compare and order unit fractions, and fractions with the same denominators.
- To solve problems that involve all of the above

Read and write time to 5 minute intervals

- 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.
- To estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/pm, morning, afternoon, noon and midnight. - To know the number of seconds in a minute and the number of days in each month, year and leap year.
- To compare durations of events, for example to calculate the time taken by particular events or tasks.
Read, present and interpret pictograms and tables
- To interpret and present data using bar charts, pictograms and tables
- To solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables.


## Year 3 Medium Term Planning Spring 1

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

Use partitioning to add and subtract two-digit numbers

- To add and subtract numbers mentally, including:
- a three-digit number and ones
- a three-digit number and tens
- a three-digit number and hundreds.
- To estimate the answer to a calculation and use inverse operations to check answers.
- To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
Multiplication and division: multiplying one- digit numbers by multiples of 10
- To recall and use multiplication and division facts for the 3,4 and 8 multiplication tables.
- To 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.
- To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects

Multiplication and division: practical and informal written methods

- To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- To 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.
- To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.


## Measures: adding and subtracting money

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


## Recognising and drawing right angles in 2D shapes

- To recognise angles as a property of shape and associate angles with turning.
- To 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.


## Year 3 Medium Term Planning Spring 2

## Addition and subtraction of two- digit numbers using columns

- To add and subtract numbers with up to three digits, using the efficient written methods of columna addition and subtraction.
- To estimate the answer to a calculation and use inverse operations to check answers.
- To solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

Multiplication and division: multiplying by multiples of 10, and dividing with remainders

- To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- To 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
- To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects.
Multiplication and division: multiplying and dividing larger numbers
- To recall and use multiplication and division facts for the 3,4 and 8 multiplication tables.
- To 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
- To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which $n$ objects are connected to m objects.
Measuring using grams and kilograms
- To measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); volume/capacity ( $\mathrm{l} / \mathrm{ml}$ ).

Fractions: representing, comparing and ordering unit and non-unit fractions of shapes and number - To 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.

- To recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.
- To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
- To recognise and show, using diagrams, equivalent fractions with small denominators.
- To compare and order unit fractions, and fractions with the same denominators
- To solve problems that involve all of the above.

Read and interpret bar charts, using scales

- To interpret and present data using bar charts, pictograms and tables
- To solve one-step and two-step questions such as 'How many more?' and 'How many fewer? using information presented in scaled bar charts and pictograms and tables


## Year 3 Medium Term Planning Summer 1

Read, write and order and round two- and three- digit numbers

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

Multiplication and division problems

- To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
- To 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.
- To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which $n$ objects are connected to $m$ objects


## Addition and subtraction of three-digit numbers and 1s, 10s and 100s

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

Shape: identifying horizontal, vertical, and curved lines

- To draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them with increasing accuracy.
- To recognise angles as a property of shape and associate angles with turning.
- To 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. - To identify horizontal, vertical, perpendicular and parallel lines in relation to other lines

Measuring using millilitres and litres

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


## Year 3 Medium Term Planning Summer 2

Addition and subtraction of two- and three-digit numbers using and columns

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


## Multiplication and division problems: written methods

- To recall and use multiplication and division facts for the 3,4 and 8 multiplication tables.
- To 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.
- To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which $n$ objects are connected to m objects.


## Short multiplication and division

- To recall and use multiplication and division facts for the 3,4 and 8 multiplication tables. - To 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.
- To solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which $n$ objects are connected to m objects.
Fractions: equivalence, addition and subtraction within 1, finding tenths
- To 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.
- To recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
- To recognise and show, using diagrams, equivalent fractions with small denominators. - To add and subtract fractions with the same denominator within one whole ( $5 / 7+1 / 7=$ 6/7).
- To solve problems that involve all of the above.

Read and write time using 12 and 24 hour

- 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.
- To estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as am/pm, morning, afternoon, noon and midnight. - To know the number of seconds in a minute and the number of days in each month, year and leap year. • To compare durations of events, for example to calculate the time taken by particular events or tasks.
Construct and interpret bar charts using scales
- To interpret and present data using bar charts, pictograms and tables.
- To solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables.

