## Year 4 Medium Term Planning Autumn 1

## Number, place value and rounding

- To recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).
- To identify, represent and estimate numbers using different representations.
- To order and compare numbers beyond 1000.
- To round any number to the nearest 10, 100 or 1000 . - To count in multiples of $6,7,9,25,1000$
- To find 1000 more or less than a given number.

Mental addition and subtraction

- To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate.
- To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.


## Mental addition and subtraction

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## Multiplication

- To recall multiplication facts for multiplication tables up to $12 \times 12$.
- To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1 ; multiplying together three numbers.
- To solve problems involving multiplying and adding, including using the distributive law and
harder multiplication problems such as which n objects are connected to m objects.


## Multiplication and division

- To recall multiplication facts for multiplication tables up to $12 \times 12$.
- To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1 ; multiplying together three numbers.


## Geometry: properties of shapes

- To compare and classify geometric shapes, including quadrilaterals and triangles, based on their - To compare and cla
properties and sizes.
- To identify lines of symmetry in 2D shapes presented in different orientations
- To complete a simple symmetric figure with respect to a specific line of symmetry


## Measures

- To convert between different units of measure (for example, kilometre to metre; hour to minute).
- To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
- To estimate, compare and calculate different measures, including money in pounds and pence.


## Year 4 Medium Term Planning Autumn 2

## Mental and written addition and subtraction

- To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate.
- To estimate and use inverse operations to check answers to a calculation.
- To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.


## Multiplication

- To recall multiplication facts for multiplication tables up to $12 \times 12$
- To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 . dividing by 1 ; multiplying together three numbers.
- To recognise and use factor pairs and commutativity in mental calculations
- To multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
- To solve problems involving multiplying and adding, including using the distributive law and harder
multiplication problems such as which n objects are connected to m objects.


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- To recognise and use factor pairs and commutativity in mental calculations
- To multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
- To solve problems involving multiplying and adding, including using the distributive law and harder
multiplication problems such as which n objects are connected to m objects.
Fractions
- To count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.
- To solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide
quantities, including non-unit fractions where the answer is a whole number.
- To recognise and show, using diagrams, families of common equivalent fractions.

Geometry

- To describe positions on a 2D grid as coordinates in the first quadrant
- To plot specified points and draw sides to complete a given polygon.
- To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
- To identify acute and obtuse angles and compare and order angles up to two right angles by size

Data handling and time

- To read, write and convert time between analogue and digital 12- and 24 -hour clocks
- To solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
- To interpret and present discrete and continuous data using appropriate graphical methods, including bar
charts and time graphs.
- To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs.


## Year 4 Medium Term Planning Spring 1

## Number, place value and rounding

- To find 1000 more or less than a given number.
- To recognise the place value of each digit in a four-digit number (thousands, hundreds, ens, and ones).
To order and compare numbers beyond 1000
- To identify, represent and estimate numbers using different representations
- To round any number to the nearest 10, 100 or 1000
- To solve number and practical problems that involve all of the above and with increasingly large positive numbers
- To read Roman numerals to 100 (I to C) and understand how, over time, the numeral system changed to include the concept of zero and place value.
Mental and written addition and subtraction • To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate.
- To estimate and use inverse operations to check answers to a calculation.
- To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
- To estimate, compare and calculate different measures, including money in pounds and pence.


## Mental and written multiplication

- To recall multiplication and division facts for multiplication tables up to $12 \times 12$
- To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1 ; multiplying together three numbers.
- To multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
- To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which n objects are connected to m objects.
Mental and written division
- To recall multiplication and division facts for multiplication tables up to $12 \times 12$.
- To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1 ; multiplying together three numbers


## ractions

To count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten

- To solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. - To recognise and show, using diagrams, families of common equivalent fractions


## Fractions and decimals

- To recognise and write decimal equivalents of any number of tenths or hundredths
- To recognise and write decimal equivalents to 1/4; 1/2; 3/4
- To find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths
To round decimals with one decimal place to the nearest whole number
- To compare numbers with the same number of decimal places up to two decimal places.
- To solve simple measure and money problems involving fractions and decimals to two
decimal places


## Year 4 Medium Term Planning Spring 2

## Mental calculatio

- To estimate and use inverse operations to check answers to a calculation.
- To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
- To recall multiplication and division facts for multiplication tables up to $12 \times 12$
- To recognise and use factor pairs and commutativity in mental calculations.
- To solve problems involving multiplying and adding, including using the distributive law and harde multiplication problems such as which n objects are connected to m objects.


## Written addition and subtraction

- To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate
- To estimate and use inverse operations to check answers to a calculation.
- To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why


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- To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate
- To estimate and use inverse operations to check answers to a calculation.
- To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.


## Written multiplication and division

- To recall multiplication and division facts for multiplication tables up to $12 \times 12$.
- To use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1 ; multiplying together three numbers
- To multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
- To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which n objects are connected to m objects.


## Geometry

- To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
- To identify acute and obtuse angles and compare and order angles up to two right angles by size.
- To describe positions on a 2D grid as coordinates in the first quadrant
- To describe movements between positions as translations of a given unit to the left/right and up/down
- To plot specified points and draw sides to complete a given polygon.

Data handling and measurement

- To interpret and present discrete data using bar charts and continuous data using time graphs.
- To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs.
- To convert between different units of measure (kilometre to metre; hour to minute)
- To estimate, compare and calculate different measures, including money in pounds and pence.

\section*{Year 4 Medium Term Planning Summer 1

## Place value ideas

## Place value ideas

- To count in multiples of 6, 7, 9, 25 and 1000.
- To find 1000 more or less than a given number.
- To count backwards through zero to include negative numbers.
- To recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).
- To order and compare numbers beyond 1000.
- To identify, represent and estimate numbers using different representations
- To round any number to the nearest 10, 100 or 1000.
- To solve number and practical problems that involve all of the above and with increasingly large positive numbers.
Mental addition and subtraction and measures (use measures as a context for problems)
- To estimate and use inverse operations to check answers to a calculation.
- To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
- To estimate, compare and calculate different measures, including money in pounds and pence


## Written addition and subtraction and measures

- To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate.
- To estimate and use inverse operations to check answers to a calculation
- To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
Mental and written multiplication and division
- To recall multiplication and division facts for multiplication tables up to $12 \times 12$.
- To use place value, known and derived facts to multiply and divide mentally, including:
multiplying by 0 and 1 ; dividing by 1 ; multiplying together three numbers.
- To recognise and use factor pairs and commutativity in mental calculations.
- To multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
- To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which n objects are connected to m objects. Fractions
- To count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten.
- To solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.
- To recognise and show, using diagrams, families of common equivalent fractions.
- To add and subtract fractions with the same denominator.

Area and perimeter of rectilinear shapes and capacity

- To convert between different units of measure (kilometre to metre; hour to minute)
- To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- To find the area of rectilinear shapes by counting.
- To estimate, compare and calculate different measures, including money in pounds and pence.


## Year 4 Medium Term Planning Summer 2

## Mental calculations

- To estimate and use inverse operations to check answers to a calculation
- To solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
- To recall multiplication and division facts for multiplication tables up to $12 \times 12$.
- To recognise and use factor pairs and commutativity in mental calculations.
- To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which $n$ objects are connected to $m$ objects.


## Measures

- To convert between different units of measure (kilometre to metre; hour to minute).
- To measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- To find the area of rectilinear shapes by counting
- To estimate, compare and calculate different measures, including money in pounds and pence
- To read, write and convert time between analogue and digital 12- and 24-hour clocks.
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- To add and subtract numbers with up to four digits using the efficient written methods of columnar addition and subtraction where appropriate.
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## Mental and written multiplication and division

- To recall multiplication and division facts for multiplication tables up to $12 \times 12$
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- To multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
- To solve problems involving multiplying and adding, including using the distributive law and harder multiplication problems such as which n objects are connected to m objects.


## 2D shape, angles and coordinates

- To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
- To identify acute and obtuse angles and compare and order angles up to two right angles by size.
- To identify lines of symmetry in 2D shapes presented in different orientations.
- To describe positions on a 2D grid as coordinates in the first quadrant.
- To describe movements between positions as translations of a given unit to the left/right and up/down
- To plot specified points and draw sides to complete a given polygon.

Statistics

- To interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
- To solve comparison, sum and difference problems using information presented in bar charts,
pictograms, tables and simple line graphs.

