

Year 4: Autumn 1 Numeracy Curriculum Objectives**Number, Place Value and Rounding**

- Count in multiples of 6, 7, 9, 25 and 1000.
- Find 1000 more or less than a given number.
- Recognise the place value of each digit in a four digit number (thousands, hundreds, tens, ones).
- Round and order any number to the nearest 10, 100 or 1000.
- Solve number and practical problems that involve all of the above and with increasingly large positive numbers.
- State inequalities using the symbols $<$, $>$ and $=$ (e.g. $-3 > 5 - 5$, $-1 < 1$) (renewed framework).

Addition and Subtraction

- Estimate and use inverse operations to check answers to a calculation.
- Add or subtract mentally pairs of two digit whole numbers (e.g. $47 + 58$, $91 - 35$) (renewed framework).

Multiplication and Division

- Recall multiplication facts up to 12×12 , the corresponding division facts and multiples of numbers to 10 up to the tenth multiple.
- 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.
- Identify the doubles of two digit numbers; use these to calculate doubles of multiples of 10 and 100 and derive the corresponding halves (renewed framework).

Fractions

- Identify, name and write equivalent fractions of a given fraction, including tenths and hundredths.

Decimals and Fractions

- Find the effect of dividing and multiplying a one-or two- digit numbers by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths.
- Round and order decimals with one decimal place to the nearest whole number.

Measures

- N/A

Geometry: Properties of Shapes

- Compare and classify geometric shapes, including quadrilaterals (e.g. parallelogram, rhombus, trapezium) and triangles (isosceles, equilateral, scalene), based on their properties and sizes.
- Identify acute and obtuse angles and compare and order angles up to two right angles by size.
- Visualise 3D objects from 2D drawings; make nets of common solids (renewed framework).

Geometry: Position, Direction, Motion

- N/A

Data

- Interpret and present discrete data using bar charts and continuous data using line graphs.
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs (Carroll Diagrams).

Year 4: Autumn 2 Numeracy Curriculum Objectives**Number, Place Value and Rounding**

- Count in multiples of 6, 7, 9, 25 and 1000.
- Count backwards through zero to include negative numbers.
- Order and compare numbers beyond 1000.
- Identify, represent and estimate numbers using different representations.
- Solve number and practical problems that involve all of the above and with increasingly large positive numbers.
- 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.

Addition and Subtraction

- Add and subtract numbers with up to 4 digits, using the efficient written methods of columnar addition and subtraction where appropriate.
- Estimate and use inverse operations to check answers to a calculation.
- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
- Add or subtract mentally pairs of two digit whole numbers (e.g. $47 + 58$, $91 - 35$) (renewed framework).

Multiplication and Division

- Recall multiplication facts up to 12×12 , the corresponding division facts and multiples of numbers to 10 up to the tenth multiple.
- Recognise and use factor pairs and commutatively in mental calculations.
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
- 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

- Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by

ten.

- Identify, name and write equivalent fractions of a given fraction, including tenths and hundredths.
- Add and subtract fractions with the same denominator, including identifying pairs of fractions that total 1 (renewed framework).

Decimals and Fractions

- Recognise and write decimal equivalents of any number of tenths or hundredths.
- Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.
- Compare numbers with the same number of decimal places up to two decimal places.

Measures

- Convert between different units of measure (e.g. kilometre to metre; hour to minute).
- Choose and use standard metric units and their abbreviations when estimating, measuring and recording length, weight and capacity; knowing the meaning of 'kilo', 'centi' and 'milli' and where appropriate, use decimal notation to record measurements (e.g. 1.3 m or 0.6 kg) (renewed framework).
- Interpret intervals and divisions on partially numbered scales and record readings accurately, where appropriate to the nearest tenth of a unit (renewed framework).
- Read, write and convert time between analogue and digital 12 and 24 hour clocks.
- Solve problems involving converting from hours to minutes; minutes to seconds, years to months, weeks to days.

Geometry: Properties of Shapes

- Compare and classify geometric shapes, including quadrilaterals (e.g. parallelogram, rhombus, trapezium) and triangles (isosceles, equilateral, scalene), based on their properties and sizes.
- Identify lines of symmetry in 2D shapes presented in different orientations.
- Complete a simple symmetric figure with respect to a specific line of symmetry.
- Visualise 3D objects from 2D drawings; make nets of common solids (renewed framework).

Geometry: Position, Direction, Motion

- Describe positions on a 2D grid as co-ordinates in the first quadrant.
- Describe movements between positions as translations of a given unit to the left/right and up/down.
- Plot specified points and draw sides to complete a given polygon.
- Recognise horizontal and vertical lines; use the 8 compass points to describe direction (renewed framework).

Data

- Interpret and present discrete data using bar charts and continuous data using line graphs.
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs (Venn Diagrams).

Year 4: Spring 1 Numeracy Curriculum Objectives**Number, Place Value and Rounding**

- Count backwards through zero, to include negative numbers.
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).
- Round and order any number to the nearest 10, 100 or 1000.
- Solve number and practical problems that involve all of the above and with increasingly large positive numbers.

Addition and Subtraction

- Add and subtract numbers with up to 4 digits, using the efficient written methods of columnar addition and subtraction where appropriate.
- Estimate and use inverse operations to check answers to a calculation.
- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
- Estimate and use inverse to check answers to a calculation, to add or subtract mentally pairs of two digit whole numbers (e.g. $47 + 58$, $91 - 35$) (renewed framework).

Multiplication and Division

- Recall multiplication facts up to 12×12 , the corresponding division facts and multiples of numbers to 10 up to the tenth multiple.
- 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.
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
- Recognise and use factor pairs and commutatively in mental calculations.
- Identify the doubles of two digit numbers; use these to calculate doubles of multiples of 10 and 100 and derive the corresponding halves (renewed framework).
- 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

N/A

Decimals and Fractions

- 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.
- Round decimals with one decimal place to the nearest whole number.
- Solve simple measure and money problems involving fractions of decimals to two decimal places.

Measures

- Convert between different units of measure (e.g. kilometre to metre; hours to minute).
- Estimate, compare and calculate different measures, including money in pounds and pence.
- Solve problems involving converting from hours to minutes; minutes to seconds, years to months, weeks to days.
- Choose and use standard metric units and their abbreviations when estimating, measuring and recording length, weight and capacity; knowing the meaning of 'kilo', 'centi' and 'milli' and where appropriate, use decimal notation to record measurements (e.g. 1.3 m or 0.6 kg) (renewed framework).

Geometry: Properties of Shape

- Compare and classify geometric shapes, including quadrilaterals (e.g. parallelogram, rhombus, trapezium) and triangles (isosceles, equilateral, scalene), based on their properties and sizes.

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Geometry: Position, Direction, Motion

- N/A

Data

- N/A

Year 4: Spring 2 Numeracy Curriculum Objectives**Number, Place Value and Rounding**

- Find 1000 more or less than a given number.
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones).
- Order and compare numbers beyond 1000.
- Identify, represent and estimate numbers using different representations, including decimals.
- Solve number and practical problems that involve all of the above and with increasingly large positive numbers.

Addition and Subtraction

- Estimate and use inverse operations to check answers to a calculation.
- Solve addition and subtraction two step problems in contexts deciding which operations and methods to use and why.
- Add or subtract mentally pairs of two digit whole numbers (e.g. $47 + 58$, $91 - 35$) (renewed framework).

Multiplication and Division

- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.
- Solve problems involving multiplying and adding, including the distributive laws and harder multiplication problems such as which n objects are connected to m objects.

Fractions

- 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.
- Add and subtract fractions with the same denominator.
- Interpret mixed numbers and position them on a number line (e.g. $3 \frac{1}{2}$) (renewed framework).

Decimals and Fractions

- Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.

- Round decimals with one decimal place to the nearest whole number.
- Compare numbers with the same number of decimal places up to two decimal places.

Measures

- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- Find the area of rectilinear shapes by counting.
- Estimate, compare and calculate different measures, including money in pounds and pence.
- Choose and use standard metric units and their abbreviations when estimating, measuring and recording length, weight and capacity; knowing the meaning of 'kilo', 'centi' and 'milli' and where appropriate, use decimal notation to record measurements (e.g. 1.3 m or 0.6 kg) (renewed framework).

Geometry: Properties of Shape

- Compare and classify geometric shapes, including quadrilaterals (e.g. parallelogram, rhombus, trapezium) and triangles (isosceles, equilateral, scalene), based on their properties and sizes.
- Identify acute and obtuse angles and compare and order angles up to two right angles by size.
- Visualise 3D objects from 2D drawings; make nets of common solids (renewed framework).

Geometry: Position, Direction, Motion

- Describe positions on a 2D grid as co-ordinates in the first quadrant.
- Describe movements between positions as translations of a given unit to the left / right and up / down.
- Plot specified points and draw sides to complete a given polygon.
- Recognise horizontal and vertical lines; use the 8 compass points to describe direction (renewed framework).

Data

- Interpret and present discrete data using bar charts and continuous data using line graphs.
Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs.

Year 4: Summer 1 Numeracy Curriculum Objectives**Number, Place Value and Rounding**

- Count backwards through zero, to include negative numbers.
- Identify, represent and estimate numbers using different representations.
- Round and order any number to the nearest 10, 100 or 1000.
- Solve number and practical problems that involve all the above and with increasingly large positive numbers.
- 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.

Addition and Subtraction

- Estimate and use inverse operations to check answers to a calculation.
- Add or subtract mentally pairs of two digit whole numbers (e.g. $47 + 58$, $91 - 35$) (renewed framework).

Multiplication and Division

- Recall multiplication facts up to 12×12 , the corresponding division facts and multiples of numbers to 10 up to the tenth multiple.
- Recognise and use factor pairs and commutatively in mental calculations.
- 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.
- Use the vocabulary of ratio and proportion to describe the relationship between two quantities (e.g. 'there are two red beads to every three blue beads, or two beads in every five beads are red'); estimate a proportion (about $\frac{1}{4}$ of the apples in the box are green) (renewed framework).
- Identify the doubles of two digit numbers; use these to calculate doubles of multiples of 10 and 100 and derive the corresponding halves (renewed framework).

Fractions

- Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by

ten.

- Identify, name and write equivalent fractions of a given fraction, including tenths and hundredths.

Decimals and Fractions

- Recognise and write decimal equivalents of any number of tenths or hundredths.
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- Round and order decimals with one decimal place to the nearest whole number.
- Solve simple measure and money problems involving fractions and decimals to two decimal places.

Measures

- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- Find the area of rectilinear shapes by counting.
- Read, write and convert time between analogue and digital 12 and 24-hour clocks.
- Choose and use standard metric units and their abbreviations when estimating, measuring and recording length, weight and capacity; knowing the meaning of 'kilo', 'centi' and 'milli' and where appropriate, use decimal notation to record measurements (e.g. 1.3 m or 0.6 kg) (renewed framework).

Geometry: Properties of Shape

- Identify acute and obtuse angles and compare and order angles up to two right angles by size.
- Identify lines of symmetry in 2D shapes presented in different orientations.
- Complete a simple symmetric figure with respect to a specific line of symmetry.
- Visualise 3D objects from 2D drawings; make nets of common solids (renewed framework).

Geometry: Position, Direction, Motion

- N/A

Data

- N/A

Year 4: Summer 2 Numeracy Curriculum Objectives**Number, Place Value and Rounding**

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