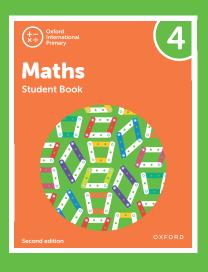


Oxford International Primary Maths

Stage 4



Lesson	ENC objective: Pupils should be taught to
1 Number and place value Engage	 count in multiples of 6, 7, 9, 25 and 1000 recognise the place value of each digit in a four-digit number (thousands, hundreds tens, and ones)
1A Place value and partitioning	 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 round any number to the nearest 10, 100 or 1000
1B Counting on and back	 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) solve number and practical problems that involve all of the above and with increasingly large positive numbers
1C Counting in multiples	 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, and ones)
1D Negative numbers	 count backwards through zero to include negative numbers identify, represent and estimate numbers using different representations
1E Roman numerals	read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value
1 Number and place value Connect	 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 round 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
1 Number and place value Review	 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, and ones) order and compare numbers beyond 1000 solve number and practical problems that involve all of the above and with increasingly large positive numbers

Lesson	ENC objective: Pupils should be taught to
2 Addition and subtraction Engage	 add and subtract numbers with up to 4 digits using the formal 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
2A Adding three or four small numbers	 add and subtract numbers with up to 4 digits using the formal 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
2B Adding or subtracting 2-digit numbers	 add and subtract numbers with up to 4 digits using the formal 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
2C Mental addition and subtraction	 add and subtract numbers with up to 4 digits using the formal 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
2D Written methods of addition	 add and subtract numbers with up to 4 digits using the formal 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
2E Written methods of subtraction	 add and subtract numbers with up to 4 digits using the formal 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
2 Addition and subtraction Connect	 add and subtract numbers with up to 4 digits using the formal 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
2 Addition and subtraction Review	 add and subtract numbers with up to 4 digits using the formal 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

Lesson	ENC objective: Pupils should be taught to
3 Multiplication and division Engage	 recall multiplication and division facts for multiplication tables up to 12 × 12 solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects
3A Multiplication tables and multiples	 recall multiplication and division facts for multiplication tables up to 12 x 12 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 recognise and use factor pairs and commutativity in mental calculations

3B Doubling and halving 3C Multiplying 2-digit numbers	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects recall multiplication and division facts for multiplication tables up to 12 × 12 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 solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects
3D Multiplication strategies	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 recognise and use factor pairs and commutativity in mental calculations
3E Written methods for multiplication	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects
3F Dividing 2-digit numbers by a single-digit number	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects
3G Rounding answers up or down	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects
3H Multiplication and division as inverse operations	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 recognise and use factor pairs and commutativity in mental calculations
3I Scaling problems	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects
3J Correspondence problems	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects

3 Multiplication and division Connect	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects
3 Multiplication and division Review	 recall multiplication and division facts for multiplication tables up to 12 × 12 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 solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects

	correspondence problems such as n objects are connected to m objects
Unit 4 Fractions and decimals	
Lesson	ENC objective: Pupils should be taught to
4 Fractions and decimals Engage	solve simple measure and money problems involving fractions and decimals to two decimal places
4A Recognising fractions	 recognise and show, using diagrams, families of common equivalent 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
4B Hundredths	 count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to ¹/₄, ¹/₂, ³/₄
4C Equivalent fractions	 recognise and show, using diagrams, families of common equivalent fractions add and subtract fractions with the same denominator
4D Using equivalence to order fractions	 recognise and show, using diagrams, families of common equivalent 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
4E Finding fractions of quantities	 recognise and show, using diagrams, families of common equivalent 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 solve simple measure and money problems involving fractions and decimals to two decimal places
4F Adding and subtracting fractions	 recognise and show, using diagrams, families of common equivalent 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
4G Equivalent fractions and decimals	 count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to \(\frac{1}{4}\), \(\frac{1}{2}\), \(\frac{3}{4}\)

4H Dividing by 10 and 100	 count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten 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 ones, tenths and hundredths
4I Rounding to the nearest whole number	round decimals with one decimal place to the nearest whole number
4J Comparing decimals	compare numbers with the same number of decimal places up to two decimal places
4K Decimals in money and measures	 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 solve simple measure and money problems involving fractions and decimals to two decimal places
4 Fractions and decimals Connect	 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 solve simple measure and money problems involving fractions and decimals to two decimal places
4 Fractions and decimals Review	 recognise and show, using diagrams, families of common equivalent fractions add and subtract fractions with the same denominator solve simple measure and money problems involving fractions and decimals to two decimal places

Unit 5 Length, mass and capacity

Lesson	ENC objective: Pupils should be taught to
5 Length, mass and capacity Engage	 convert between different units of measure [for example, kilometre to metre; hour to minute] estimate, compare and calculate different measures, including money in pounds and pence
5A Estimating, measuring and recording length	 convert between different units of measure [for example, kilometre to metre; hour to minute] estimate, compare and calculate different measures, including money in pounds and pence
5B Estimating, measuring and recording mass	 convert between different units of measure [for example, kilometre to metre; hour to minute] estimate, compare and calculate different measures, including money in pounds and pence
5C Estimating, measuring and recording capacity	 convert between different units of measure [for example, kilometre to metre; hour to minute] estimate, compare and calculate different measures, including money in pounds and pence
5D Using and reading scales	 convert between different units of measure [for example, kilometre to metre; hour to minute] estimate, compare and calculate different measures, including money in pounds and pence
5 Length, mass and capacity Connect	estimate, compare and calculate different measures, including money in pounds and pence
5 Length, mass and capacity Review	 convert between different units of measure [for example, kilometre to metre; hour to minute] estimate, compare and calculate different measures, including money in pounds and pence

Unit 6 Area and perimeter	
Lesson	ENC objective: Pupils should be taught to
6 Area and perimeter Engage	 measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares
6A Calculating area and perimeter	 measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares
6B Finding the area of rectilinear shapes	 measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares
6 Area and perimeter Connect	 measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares
6 Area and perimeter Review	 measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares

Unit 7 Time	
Lesson	ENC objective: Pupils should be taught to
7 Time Engage	read, write and convert time between analogue and digital 12- and 24-hour clocks
7A Different ways of telling the time	read, write and convert time between analogue and digital 12- and 24-hour clocks
7B Timetables and calendars	 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
7C Measuring time intervals	 solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days
7 Time Connect	 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
7 Time Review	 solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days

Unit 8 Geometry – properties of shapes

Lesson	ENC objective: Pupils should be taught to
8 Geometry – properties of shapes Engage	 compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
8A 2D shapes	 compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes 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
8B 3D shapes	 compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
8C 2D nets of 3D shapes	 compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

8D Completing symmetrical pictures	 compare and classify geometric shapes, including quadrilaterals and triangles, 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
8E Drawing symmetrical pictures	 identify lines of symmetry in 2D shapes presented in different orientations complete a simple symmetric figure with respect to a specific line of symmetry
8F Line symmetry	 identify lines of symmetry in 2-D shapes presented in different orientations complete a simple symmetric figure with respect to a specific line of symmetry
8G Angles	 identify acute and obtuse angles and compare and order angles up to two right angles by size
8 Geometry – properties of shapes Connect	 compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes 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
8 Geometry – properties of shapes Review	 compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes identify lines of symmetry in 2D shapes presented in different orientations

Unit 9 Geometry – position and direction

Lesson	ENC objective: Pupils should be taught to
9 Geometry – position and direction Engage	 describe positions on a 2D grid as coordinates in the first quadrant describe movements between positions as translations of a given unit to the left/right and up/down
9A Directions	This content is additional to the ENC requirements.
9B Giving directions to follow a path	 describe movements between positions as translations of a given unit to the left/right and up/down
9C Coordinates of a point on a grid	describe positions on a 2D grid as coordinates in the first quadrant
9D Translations	 describe movements between positions as translations of a given unit to the left/right and up/down
9E Plotting shapes on a coordinate grid	 describe positions on a 2D grid as coordinates in the first quadrant plot specified points and draw sides to complete a given polygon
9 Geometry – position and direction Connect	 describe movements between positions as translations of a given unit to the left/right and up/down
9 Geometry – position and direction Review	 describe positions on a 2D grid as coordinates 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

Unit 10 Statistics

Lesson	ENC objective: Pupils should be taught to
10 Statistics Engage	 interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
10A Collecting, presenting and interpreting data	 interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
	 solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

10B Comparing scales with different intervals	 interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
10C Time graphs	 interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
10D Using Venn diagrams and Carroll diagrams	 interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
10 Statistics Connect	 interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
10 Statistics Review	 interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs