

YEAR 4

Sequence 1

- count in multiples of 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
- 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

Sequence 2

- 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
- estimate, compare and calculate different measures, including money in pounds and pence
- 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

Sequence 3

- count in multiples of 6, 7, 9, 25 and 1000
- 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
- solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling and harder correspondence problems which n objects are connected to m objects

Sequence 4

- 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 2-D shapes presented in different orientations

Sequence 5

- count in multiples of 1000
- find 1000 more or less than a given number
- 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)
- 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
- 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

Sequence 6	- 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 - estimate, compare and calculate different measures, including money in pounds and pence - 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
Sequence 7	- count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten - recognise and show, using diagrams, families of common equivalent fractions - add and subtract fractions with the same denominator - recognise and write decimal equivalents of any number of tenths or hundredths - recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ - 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 - 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 - convert between different units of measure [for example, kilometre to metre; hour to minute]
Sequence 8	- count in multiples of 6, 7, 9, 25 and 1000 - 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 - solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit, integer scaling and harder correspondence problems such as n objects are connected to m objects. - 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 problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days
Sequence 9	- compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes - describe positions on a 2-D 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
Sequence 10	- count in multiples of 1000 - find 1000 more or less than a given number - 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) - 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 - convert between different units of measure [for example, kilometre to metre; hour to minute] - 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 - solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

Sequence 11	- 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 - interpret and present discrete and continuous data using bar charts and time graphs - solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs - solve simple measure and money problems involving fractions and decimals to two decimal places - estimate, compare and calculate different measures, including money in pounds and pence	
Sequence 12	- count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten - recognise and show, using diagrams, families of common equivalent fractions - add and subtract fractions with the same denominator - recognise and write decimal equivalents of any number of tenths or hundredths - recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ - 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 - 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 - convert between different units of measure [for example, kilometre to metre; hour to minute]
Sequence 13	- count in multiples of 6, 7, 9, 25 and 1000 - 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 - 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 and harder correspondence problems such as n objects are connected to m objects	- 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 problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days
Sequence 14	- 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 2-D shapes presented in different orientations - complete a simple symmetric figure with respect to a specific line of symmetry - measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres - find the area of rectilinear shapes by counting squares	