



Autumn Term

Block One: Place value

- Find 10 or 100 more or less than a given number, including numbers where crossing a place-value boundary is required.
- Recognise the place value of each digit in a three-digit number and explain the value of each digit in terms of hundreds, tens and ones.
- Compare and order numbers up to 1000, using the symbols $<$, $>$ and $=$ and explaining how the place value of the digits helps to determine their order.
- Identify, represent and estimate numbers up to 1000 using different representations, including concrete resources, pictorial representations, number lines and place-value representations.
- Read and write numbers up to 1000 in numerals and words, including numbers containing zero as a place holder.
- Use place value knowledge to solve number and practical problems involving numbers up to 1000, explaining the strategies used.
- Solve place-value problems involving missing values, including finding a number from clues about its digits or place value.
- Solve problems by finding all possible numbers that meet given conditions, working systematically and explaining how they know all possibilities have been found.
- Ongoing – Count from 0 in multiples of 4, 8, 50 and 100.

Block Four: Multiplication and division

- Write and calculate mathematical statements for multiplication and division using known multiplication tables, including calculations involving two-digit numbers multiplied by one-digit numbers.
- Use known multiplication and division facts to calculate mentally, using partitioning and related facts to solve calculations efficiently.
- Multiply two-digit numbers by one-digit numbers using mental methods and appropriate written methods, explaining the strategy used.
- Use multiplication and division facts to solve missing-number calculations and identify the relationship between multiplication and division.
- Ongoing – Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.

Maths Yearly Overview Year 3

Block Two: Addition and subtraction

- Add and subtract mentally, including a three-digit number and ones, tens or hundreds, using place value knowledge and known facts.
- Use mental strategies to add and subtract three-digit numbers, including partitioning numbers and adjusting calculations to make them easier.
- Add and subtract numbers with up to three digits using formal written methods of columnar addition and subtraction, with and without exchanging.
- Use estimation and checking strategies to decide whether an addition or subtraction calculation is reasonable and identify errors in calculations.
- Solve addition and subtraction problems involving numbers, quantities and measures, selecting an appropriate mental or written method and explaining the strategy used.
- Solve problems involving missing values, including finding a missing number, part or whole in addition and subtraction calculations.
- Solve problems by finding all possible solutions, working systematically and explaining how they know all possibilities have been found.

Block Five: Fractions

- Recognise and use fractions as numbers, including unit fractions and non-unit fractions with small denominators, and identify the numerator and denominator.
- Understand that a unit fraction represents one equal part of a whole and that non-unit fractions represent more than one equal part.
- Count up and down in tenths and recognise that tenths arise when an object, shape or quantity is divided into 10 equal parts.
- Recognise that dividing a one-digit number or quantity by 10 gives tenths and represent these fractions using concrete and pictorial representations.
- Compare and order unit fractions and fractions with the same denominator, using representations and reasoning to explain which fraction is greater or smaller.



Block Three: Geometry – properties of shapes

- Draw 2-D shapes accurately, using appropriate equipment, and recognise and describe the shapes drawn.
- Make 3-D shapes using modelling materials and recognise 3-D shapes when they are presented in different orientations.
- Recognise and describe familiar 2-D and 3-D shapes in different orientations and explain how they know which shape it is.
- Use knowledge of 2-D and 3-D shapes to identify shapes from descriptions and clues.
- Solve problems involving shapes, including identifying missing information and finding shapes that meet given conditions.
- Find all possible shapes that satisfy given conditions, working systematically and explaining how they know all possibilities have been found.

Block Six: Measurement- Time and money

- Know the number of days in each month and the number of days in a year and leap year, and use this knowledge to solve problems involving dates.
- Tell and write the time from an analogue clock, using appropriate mathematical language to describe the time.
- Read and interpret times shown on analogue clocks and use this knowledge to solve practical problems involving time.
- Add and subtract amounts of money to give change, using both pounds (£) and pence (p) in practical contexts.
- Solve problems involving money, including finding totals, calculating change and finding missing values.
- Solve time and money problems by finding all possible solutions.



Maths Yearly Overview

Year 3



Spring Term

Block One: Place value

- Find 10 or 100 more or less than a given number, including when crossing a place-value boundary.
- Use knowledge of place value to solve number and practical problems involving finding 10 or 100 more or less, explaining the strategy used.
- Solve place-value problems involving missing values, including finding numbers from clues about their value or position in the number sequence.
- Solve problems by finding all possible numbers that meet given conditions, working systematically and explaining how they know all possibilities have been found.
- **Ongoing – Count from 0 in multiples of 4, 8, 50 and 100.**

Block Two: Addition and subtraction

- Add and subtract numbers with up to three digits using formal written methods of columnar addition and subtraction, including exchanging where necessary.
- Estimate the answer to a calculation before calculating and use the estimate to decide whether the answer is reasonable.
- Use inverse operations to check answers and identify and correct errors in calculations.
- Solve addition and subtraction problems involving numbers, quantities and measures, selecting an appropriate method and explaining the reasoning used.
- Solve problems involving missing values, including finding a missing number, part or whole in an addition or subtraction calculation.
- Solve problems by finding all possible solutions, working systematically and explaining how they know all possibilities have been found.

Block Three: Multiplication and division

- Write and calculate mathematical statements for multiplication and division using known multiplication tables, including calculations involving two-digit numbers multiplied by one-digit numbers.
- Use mental methods to multiply and divide, drawing on known multiplication and division facts and related facts to calculate efficiently.
- Multiply two-digit numbers by one-digit numbers using an appropriate written method, progressing from informal representations to formal written methods.
- Use multiplication and division facts to solve calculations and missing-value problems, explaining the relationship between the operations.
- Estimate and check multiplication and division calculations and use known facts or inverse operations to identify and correct errors.
- **Ongoing – Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.**

Block Four: Fractions

- Recognise, find and write fractions of a discrete set of objects, including unit and non-unit fractions with small denominators.
- Find fractions of quantities and sets of objects using concrete materials, pictorial representations and known facts, explaining the method used.
- Recognise that the denominator shows the number of equal parts in the whole and the numerator shows how many of those parts are being considered.
- Add and subtract fractions with the same denominator within one whole, using representations to support understanding.
- Solve problems involving fractions of quantities and sets of objects, including finding missing values and using fractions to find a solution.
-

Block Five: Measurement- Time and Perimeter

- Tell and write the time using Roman numerals from I to XII and 12-hour clocks, and use appropriate vocabulary including o'clock, a.m., p.m., morning, afternoon, noon and midnight.
- Estimate and read time with increasing accuracy to the nearest minute, and record and compare times in terms of seconds, minutes and hours.
- Solve problems involving time, including finding missing times and calculating the duration of events using seconds, minutes and hours.
- Measure the perimeter of simple 2-D shapes by measuring and adding the lengths of their sides.
- Solve problems involving the perimeter of simple 2-D shapes, including finding missing side lengths and using known information to find a solution.

Block Six: Geometry – properties of shapes

- Recognise angles as a property of shape and as a description of a turn, and describe angles using appropriate mathematical language.
- Identify right angles and recognise that two right angles make a half-turn, three right angles make three quarters of a turn and four right angles make a complete turn.
- Identify whether angles are greater than or less than a right angle and explain how this can be determined.
- Identify horizontal and vertical lines and recognise pairs of perpendicular and parallel lines.
- Solve problems involving angles and lines, including identifying missing information and using clues to determine the possible answer.



Maths Yearly Overview

Year 3



Block Seven: Measurement- length

- Measure lengths accurately using metres (m), centimetres (cm) and millimetres (mm), choosing an appropriate unit and measuring equipment.
- Compare and order lengths measured in metres, centimetres and millimetres, using appropriate mathematical language and symbols.
- Add and subtract lengths using metres, centimetres and millimetres, recording calculations accurately and using appropriate representations where helpful.
- Use knowledge of equivalent measurements to solve problems involving lengths, including converting between metres, centimetres and millimetres where appropriate.
- Solve practical problems involving length, including finding missing lengths and using known measurements to find a solution



Maths Yearly Overview

Year 3



Summer Term

Block One: Fractions

- Solve problems involving fractions, including finding fractions of lengths, shapes, sets of objects and quantities.
- Recognise and show, using diagrams and representations, equivalent fractions with small denominators.
- Use diagrams and representations to explain why two fractions are equivalent and identify equivalent fractions.
- Compare fractions with the same denominator and use known equivalent fractions to support reasoning.
- Solve fraction problems involving missing values, including finding a missing fraction or quantity when other information is given.
-

Block Two: Addition and subtraction

- Add and subtract numbers with up to three digits using formal written methods of columnar addition and subtraction, including exchanging where necessary.
- Use number facts and place value knowledge to solve addition and subtraction calculations efficiently, choosing an appropriate mental or written method.
- Solve problems involving addition and subtraction in a range of contexts, including problems with more than one step.
- Solve missing number problems using number facts, place value and addition and subtraction strategies, explaining how the missing value was found.
- Use estimation and inverse operations to check calculations and identify and correct errors.

Block Three: Multiplication and division

- Write and calculate mathematical statements for multiplication and division using known multiplication tables, including calculations involving two-digit numbers multiplied by one-digit numbers, using mental and appropriate written methods.
- Solve multiplication and division problems, including missing number problems, using known facts, representations and appropriate calculation methods.
- Solve positive integer scaling problems, using multiplication or division to find how a quantity changes when it is made a given number of times larger or smaller.
- Use known multiplication and division facts to identify patterns and relationships and use these to solve unfamiliar calculations and problems.

Block Four: Statistics

- Interpret and present data using bar charts, pictograms and tables, including charts and pictograms with different scales.
- Read and interpret information presented in bar charts, pictograms and tables, using the scale accurately to identify and compare quantities.
- Solve one-step and two-step questions using information presented in scaled bar charts, pictograms and tables, including questions such as how many more, how many fewer and how many altogether.
- Choose an appropriate representation to present a given set of data and explain why it is suitable.
- Solve problems by identifying patterns and relationships within data and using these to answer questions or make deductions.

Block Five: Measurement- mass

- Measure mass accurately using kilograms (kg) and grams (g), choosing an appropriate unit and measuring equipment.
- Compare and order masses measured in kilograms and grams, using appropriate mathematical language and symbols.
- Add and subtract masses using kilograms and grams, recording calculations accurately and using appropriate representations where helpful.
- Solve practical problems involving mass, including finding missing masses and using known measurements to find a solution.
- Estimate the mass of objects and use measurements to check whether estimates are reasonable.
- Solve problems involving mass by identifying patterns and relationships and explaining the reasoning used.

Block Six: Measurement- capacity

- Measure capacity accurately using litres (l) and millilitres (ml), choosing an appropriate unit and measuring vessel.
- Compare and order capacities measured in litres and millilitres, using appropriate mathematical language and symbols.
- Add and subtract capacities using litres and millilitres, using practical equipment and appropriate representations to support calculations.
- Estimate the capacity of containers and use measurements to check whether estimates are reasonable.
- Solve practical problems involving capacity, including finding missing amounts and calculating how much more or less a container can hold.