



Maths – Year 3

Yearly Topic Overview

Rising Stars Mathematics



PARISH
CE Primary School

These medium-term plans give a complete at-a-glance overview of the structure of Maths at Parish for Year 3 detailing the order of teaching, key concepts, questions and vocabulary and a suggestion of what could be covered each term with some flexibility. Each length of topic (in weeks) differs. Some topics may take 2 weeks to cover, others may take longer depending on the class and cohort. If teachers are confident that children have mastered a concept, then it is acceptable to move on quickly, just as it is important to allow children to spend longer on a topic if necessary to ensure they have fully mastered it before moving on. It is important to remember that the length of a half-term will vary. If the half-term is short, teachers can choose to move a unit into the next term. If a half-term is long, teachers can choose to move a unit back into the preceding term. It is best practice to avoid splitting units between two half-terms, unless the content in each concept is very distinct. Please use these topic overviews as a guide to your class' planning, teaching and learning to provide consistency across the year group.

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Autumn 1	Year 3		
Strand	All about numbers – Number sense		
Domain	1. Number and Place Value 2. Measurement		
Key Concepts	Tens and hundreds Hundreds, tens and ones Comparing and ordering numbers Representing numbers	Key Vocabulary	ones, tens, hundreds, zero, multiple, more than, less than, value, place value, numerals, words, compare, order, identify, represent, estimate
Objectives	<ul style="list-style-type: none"> • Count from zero in multiples of 100. • Find ten or 100 more or less than a given number. • Recognise the place value of each digit in a 3-digit number. • Read and write numbers up to 500 in numerals and words. • Recognise the place value of each digit in a 3-digit number. • Compare and order numbers up to 500. • Identify, represent and estimate numbers to 500 using different representations. 		
Key questions	Can I count in tens and hundreds? Can I explore place value and compare and order numbers with 3 digits? Can I explore place value and compare and order numbers with 3 digits? Can I represent numbers in a variety of ways?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Autumn 1	Year 3		
Strand	Mental and written calculation – Additive reasoning		
Domain	<ol style="list-style-type: none"> 1. Number – addition and subtraction 2. Measurement 		
Key Concepts	Mental calculation strategies Sums and differences Developing written methods	Key Vocabulary	Addition, subtraction, mental methods, digits, missing number, value, number facts, sum, difference, written methods, estimate, calculation, inverse, partition, column
Objectives	<ul style="list-style-type: none"> • Add and subtract numbers mentally. • Add and subtract numbers with up to three digits. • Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction. • Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. • Estimate the answer to a calculation and use inverse operations to check answers. 		
Key questions	<p>Can I use mental strategies to add and subtract numbers with 2 digits?</p> <p>Can I use partitioning and column methods to add and subtract numbers with 3 digits?</p>		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Autumn 2	Year 3		
Strand	Ways to multiply and divide – Multiplicative reasoning		
Domain	1. Number - multiplication and division 2. Measurement 3. Statistics		
Key Concepts	2s, 4s and 8s Commutativity Sharing and possibilities	Key Vocabulary	multiplication, division, commutative, sharing, possibilities,
Objectives	<ul style="list-style-type: none"> Recall and use multiplication and division facts for the three, four and eight multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers multiplied by single-digit numbers, mentally and progressing to formal methods. Solve problems involving multiplication and division, including correspondence problems in which n objects are connected to m objects 		
Key questions	Can I use the 2, 4, and 8 times tables? Can I understand that multiplications can be performed in any order? Can I solve problems involving sharing objects between people?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Autumn 2	Year 3		
Strand	Angles and shapes - Geometric reasoning		
Domain	1. Geometry – properties of shape		
Key Concepts	Making and describing shapes Angles	Key Vocabulary	shape, 2-D, 3-D, properties, regular, irregular, faces, vertices, edges, angles, scaling, bar chart, pictogram, tables, right angles, greater than, less than, acute, obtuse
Objectives	<ul style="list-style-type: none"> • Draw 2-D shapes and make 3-D shapes using modelling materials. • Recognise 3-D shapes in different orientations and describe them. • Solve one-step and two-step questions using information in scaled bar charts, pictograms and tables. • Recognise angles as a property of shapes or a description of a turn. • Identify right angles. • Identify whether angles are greater than or less than a right angle 		
Key questions	Can I make and describe 3-D shapes? Can I identify different types of angles?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Autumn 2	Year 3		
Strand	Number and place value - Number sense		
Domain	<ol style="list-style-type: none"> 1. Number and Place Value 2. Measurement 3. Statistics 4. Fractions 		
Key Concepts	Counting in steps of different sizes Writing and comparing numbers Tenths	Key Vocabulary	value, multiples, more than, less than, bar chart, pictogram, table, compare, order, identify, represent, statistics, fractions, mass, kilograms, grams, tenths, dividing, equal parts, numerator, denominator, vinculum
Objectives	<ul style="list-style-type: none"> • Count from zero in multiples of four, eight, 50 and 100. • Find ten or 100 more or less than a given number. • Interpret and present data using bar charts, pictograms and tables. • Recognise the place value of each digit in a 3-digit number. • Compare and order numbers to 1000. • Identify and represent numbers to 750 using different representations. • Read and write numbers to 750 in numerals and words. • Measure and compare mass (kg/g). • Count up and down in tenths; recognise that tenths arise from dividing an object into ten equal parts and dividing single-digit numbers or quantities by ten. • Solve number and practical problems. 		
Key questions	Can I count in steps of different sizes? Can I write and compare 3-digit numbers? Can I calculate and count in tenths?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Spring 1	Year 3		
Strand	Addition and subtraction – Additive reasoning		
Domain	<ol style="list-style-type: none"> 1. Number – addition and subtraction 2. Measurement 3. Statistics 		
Key Concepts	Adding 3-digit numbers Subtracting 3-digit numbers	Key Vocabulary	addition, subtraction, place value, estimate, inverse, columnar addition, columnar subtraction
Objectives	<ul style="list-style-type: none"> • Add numbers mentally using number facts, place value. • Add numbers with up to three digits using the formal written methods of columnar addition where appropriate. • Estimate and use inverse operations to check answers to a calculation. • Solve addition and subtraction problems in contexts, deciding which operations and methods to use and why. • Subtract numbers mentally using number facts, place value. • Subtract numbers with up to three digits using the formal written methods of columnar subtraction where appropriate. • Estimate and use inverse operations to check answers to a calculation. • Solve addition and subtraction problems in contexts, deciding which operations and methods to use and why. 		
Key questions	Can I add 3-digit numbers? Can I subtract 3-digit numbers?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Spring 1	Year 3		
Strand	Writing and using fractions – Number sense		
Domain	<ol style="list-style-type: none"> 1. Number and place value 2. Fractions 2. Measurement 		
Key Concepts	Showing numbers in different ways Unit and non-unit fractions Adding and subtracting fractions	Key Vocabulary	represent, compare, tenths, dividing, fractions, unit fraction, non-unit fractions, numerator, denominator, vinculum, wholes, parts of a whole
Objectives	<ul style="list-style-type: none"> • Identify, represent and compare numbers to 1000 using different representations. • Count up and down in tenths, recognise that tenths arise from dividing an object into ten equal parts and dividing single digits or quantities by ten. • Recognise and use fractions as numbers; unit and non-unit fractions with small denominators. • Compare and order unit fractions and fractions with the same denominator. • Solve number and practical problems. • Add and subtract fractions with the same denominator within one whole. 		
Key questions	Can I represent large numbers and fractions in different ways? Can I use unit and non-unit fractions? Can I add and subtract fractions?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Spring 2	Year 3		
Strand	Using multiplication and division facts – Multiplicative reasoning		
Domain	<ol style="list-style-type: none"> 1. Number – multiplication and division 2. Measurement 3. Statistics 		
Key Concepts	Multiplication tables Multiplying and dividing by 5 and 20 Missing number problems Scaling	Key Vocabulary	multiplication, division, doubles, halves, positive, scaling,
Objectives	<ul style="list-style-type: none"> • Recall and use multiplication and division facts for the three, four and eight multiplication tables. • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers multiplied by single-digit numbers, using mental and progressing to formal written methods. • Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems in which n objects are connected to m objects. 		
Key questions	Can I use multiplication tables and explore doubling and halving? Can I multiply and divide by 5 and 20? Can I use scaling and solve missing number problems involving multiplication and division?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Spring 2	Year 3		
Strand	Exploring lines and turns – Geometric Reasoning		
Domain	Geometry - properties of shapes		
Key Concepts	Lines Line and Turns Turning	Key Vocabulary	lines, horizontal, vertical, perpendicular, parallel, 2-D, 3-D, data, tables, angles, acute, obtuse, right angle, turns, identify, recognise, quarter, half, three-quarter, clockwise, anti-clockwise
Objectives	<ul style="list-style-type: none"> • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. • Draw 2-D shapes and make 3-D shapes using modelling materials. • Present data using tables. • Recognise angles as a property of shape or a description of a turn. • Identify right angles. • Recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn. • Recognise 3-D shapes in different orientations and describe them. 		
Key questions	Can I identify different types of lines? Can I describe turns using clockwise and anti-clockwise?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Summer 1	Year 3		
Strand	Using number and place value – Number sense		
Domain	<ol style="list-style-type: none"> 1. Number – Number and place value 2. Measurement 3. Statistics 		
Key Concepts	Reading and writing numbers Using place value	Key Vocabulary	numerals, words, analogue, digital, 12-hour, estimate, seconds, minutes, hours, days, months, years, leap year, o'clock, a.m, p.m, morning, afternoon, noon, midnight, tenths, divide, bar chart, duration
Objectives	<ul style="list-style-type: none"> • Read and write numbers up to 1000 in numerals and words. • Tell and read the time from an analogue clock, including using Roman numerals, and 12-hour clocks. • Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. • Identify, represent and compare numbers to 1000 using different representations. • Count up and down in tenths, recognise that tenths arise from dividing an object into ten equal parts and dividing single digit numbers or quantities by ten. • Interpret data using bar charts. • Know the number of seconds in a minute and the number of days in each month, year and leap year. • Compare durations of events. 		
Key questions	<p>Can I write numbers in numerals and words?</p> <p>Can I write and estimate times?</p>		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Summer 1	Year 3		
Strand	3-digit sums and differences – Additive Reasoning		
Domain	<ol style="list-style-type: none"> 1. Number – Addition and subtraction 2. Measurement 3. Statistics 		
Key Concepts	Adding 3-digit numbers Subtracting 3-digit numbers	Key Vocabulary	addition, subtraction, ones, tens, hundreds, columnar addition, columnar subtraction, estimate, inverse, number facts, place value, commutative
Objectives	<ul style="list-style-type: none"> • Add numbers mentally including a 3-digit number and ones, tens and hundreds. • Add numbers with up to three digits using the formal written methods of columnar addition. • Estimate the answer to a calculation and use inverse operations to check answers. • Solve problems, including missing number problems, using number facts, place value and more complex addition. • Subtract numbers mentally including a 3-digit number and ones, tens and hundreds. • Subtract numbers with up to three digits using formal written methods of columnar subtraction. • Solve problems, including missing number problems, using number facts, place value and more complex subtraction. 		
Key questions	<p>Can I add 3-digit numbers using mental and written methods?</p> <p>Can I subtract 3-digit numbers using mental and written methods?</p>		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Summer 1	Year 3		
Strand	Representing whole numbers and fractions – Number Sense		
Domain	<ol style="list-style-type: none"> 1. Number and Place Value 2. Fractions 3. Measurement 		
Key Concepts	Representing whole numbers and tenths Finding and using unit and non-unit fractions Equivalent fractions	Key Vocabulary	wholes, parts of a whole, fractions, tenths, identify, compare, measure, length, metres, centimetres, millimetres, unit fractions, non-unit fractions, numerator, denominator, vinculum, pounds, pence, equivalence, mass, kilograms, grams
Objectives	<ul style="list-style-type: none"> • Identify, represent and compare numbers to 1000 using different representations. • Count up and down in tenths, recognise that tenths arise from dividing an object into ten equal parts and dividing single digit numbers or quantities by ten. • Solve number and practical problems involving measure and compare lengths (m/cm/mm). • Recognise and use fractions as numbers; unit and non-unit fractions with small denominators. • Compare and order unit fractions and fractions with the same denominator. • Add and subtract amounts of money to give change, using both £ and p in practical contexts. • Recognise and show, using diagrams, equivalent fractions with small denominators. • Add and subtract fractions with the same denominator within one whole. • Solve number and practical problems involving measure; compare, add and subtract: mass (kg/g). 		
Key questions	Can I represent large numbers and tenths in different ways? Can I find and compare unit and non-unit fractions? Can I find equivalent fractions? Can I add and subtract fractions?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Summer 2	Year 3		
Strand	Written methods for multiplication and division – Multiplicative Reasoning		
Domain	<ol style="list-style-type: none"> 1. Number – multiplication and division 2. Measurement 		
Key Concepts	Working towards the written method for multiplication Working towards the written method for division	Key Vocabulary	multiplication, division, multiples, factors, arrays, grid method, partitioning, sharing, grouping
Objectives	<ul style="list-style-type: none"> • Write and calculate mathematical statements for multiplication and division using known multiplication tables, including for 2-digit numbers multiplied by single-digit numbers, using mental and progressing to formal methods. • Write and calculate mathematical statements for multiplication and division using known multiplication tables, including for 2-digit numbers multiplied by single-digit numbers, using mental and progressing to formal methods. 		
Key questions	Can I use arrays to model the grid method of multiplication? Can I use arrays and partitioning to model division?		

Maths Yearly Topic Overview – Year 3



Subject: **Maths**

Term: Summer 2	Year 3		
Strand	2-D shapes and perimeter – Geometric Reasoning		
Domain	<ol style="list-style-type: none"> Geometry – Properties of shape Measurement 		
Key Concepts	All about 2-D shapes Measuring perimeter	Key Vocabulary	2-D, properties, edges, vertices, angles, obtuse, acute, right angles, regular, irregular, perimeter, bar chart, pictogram, tables, length, metres, centimetres, millimetres
Objectives	<ul style="list-style-type: none"> Draw 2-D shapes and describe them. Interpret and present data using bar charts, pictograms and tables. Measure, compare, add and subtract: lengths (m/cm/mm). Measure the perimeter of simple 2-D shapes. Interpret and present data using bar charts, pictograms and tables. 		
Key questions	<p>Can I use the properties of 2-D shapes to identify them?</p> <p>Can I measure the perimeter of simple 2-D shapes?</p>		