



Maths – Year 2

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 2 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 2



Subject: **Maths**

Term: Autumn 1	Year 2		
Strand	Comparing and Ordering – Number Sense		
Domain	1. Number and Place Value 2. Measurement		
Key Concepts	Comparing numbers Partitioning numbers Tallest, longest, shortest Units of time	Key Vocabulary	partitioning, parts of a whole, measurement, intervals, minutes, greater, less than, equal to, length, height, sequence
Objectives	<ul style="list-style-type: none"> • Partition a 2-digit number into tens and ones. • Identify and represent numbers using different representations. • Compare and order numbers from 0 to 100. • Recognise the place value of each digit in a 2-digit number. • Compare and order numbers from 0 to 100. • Identify and represent numbers using different representations. • Partition a 2-digit number into tens and ones in different ways and use partitioning to solve problems. • Measure and compare lengths and heights using appropriate standard units. • Interpret and construct simple diagrams • Compare and sequence intervals of time. • Interpret simple timetables. • Ask and answer questions comparing data 		
Key questions	Can I compare and order 2-digit numbers? Can I partition numbers in different ways and compare lengths? Can I compare and sequence intervals of time?		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Autumn 1	Year 2		
Strand	Addition and Subtraction – Additive reasoning		
Domain	1. Number – addition and subtraction		
Key Concepts	Fact families Adding and subtracting ones Adding three single-digit numbers Adding and subtracting tens	Key Vocabulary	fact families, number bonds, tens, ones, commutative, addition, subtraction
Objectives	<ul style="list-style-type: none"> Recall and use number bonds for ten. Find, recall and use addition and subtraction facts to 20 fluently. Add and subtract numbers using concrete objects, pictorial representations and mentally, including: a 2-digit number and ones. Show that addition can be done in any order (commutative). Solve problems with addition and subtraction of numbers, quantities and measures using concrete objects, pictorial representations and mental methods. Add numbers using concrete objects, pictorial representations and mentally, including adding three single-digit numbers. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. 		
Key questions	<p>Can I use number bonds and fact families to solve addition and subtraction problems to 20 and add and subtract ones?</p> <p>Can I add three single-digit numbers and add and subtract tens?</p>		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Autumn 1	Year 2		
Strand	Shapes All Around Us – Geometric Reasoning		
Domain	1. Geometry – Properties of Shape 2. Geometry – Position and Direction		
Key Concepts	Patterns Faces, vertices and edges Symmetry	Key Vocabulary	2-D, 3-D, patterns, faces, vertices, edges, symmetry, symmetrical, polygon, quadrilateral, vertical, horizontal
Objectives	<ul style="list-style-type: none"> • Explore patterns in a variety of ways using 2-D and 3-D shapes. • Compare and sort common 2-D and 3-D shapes and everyday objects. • Explore and sort 3-D shapes according to the shape of their faces, number of vertices and edges. • Identify and name different polygons and describe their properties and quadrilaterals. • Compare and sort common 2-D and 3-D shapes and everyday objects. • Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line. 		
Key questions	Can I explore patterns of 2-D shapes and 3-D shapes and properties of 3-D shapes? Can I investigate vertical lines of symmetry in 2-D shapes?		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Autumn 2	Year 2		
Strand	Number and Measurement – Number Sense		
Domain	1. Number and Place Value 2. Measurement		
Key Concepts	Less than and greater than How much...? Quarter Past and Quarter to	Key Vocabulary	less than, greater than, equal to, compare, order, mass, weight, kilograms, grams, capacity, litres, millilitres, scales, volume, quantity, quarter past, quarter to, hour, minutes
Objectives	<ul style="list-style-type: none"> • Compare and order numbers from 0 up to 100; use and = signs. • Compare and order lengths and record the results using >, < and =. • Choose and use appropriate standard units to measure mass (weight) (kg/g) and capacity (litres/ ml) to the nearest appropriate unit using scales and measuring vessels. • Compare and order mass (weight), volume/capacity and record the results using >, < and =. • Tell and write the time using quarter past and quarter to the hour, and draw the hands on a clock to show these times. • Know the number of minutes in an hour and the number of hours in a day. 		
Key questions	Can I order and compare numbers and quantities using 'less than', 'greater than' and 'equals' signs? Can I order and compare quantities using 'less than', 'greater than' and 'equals' signs? Can I tell the time to the nearest quarter of an hour?		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Autumn 2	Year 2		
Strand	Money – Additive Reasoning		
Domain	1. Number – Addition and Subtraction 2. Measurement		
Key Concepts	Patterns in calculations Pounds and pence Adding and subtracting money Money problems	Key Vocabulary	patterns, pounds, pence, estimate, commutative, amount, value, addition, subtraction, change, money
Objectives	<ul style="list-style-type: none"> Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. Identify, represent and estimate numbers using different representations, including the number line. Show that addition of two numbers can be done in any order (commutative). Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations of coins to equal the same amounts of money. Solve simple problems in a practical context involving addition of money of the same unit. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying the increasing knowledge of mental and written methods. Interpret and construct simple tables. 		
Key questions	Can I derive number facts up to 100? Can I add and subtract amounts of money and solve money problems? Can I add and subtract amounts of money and solve money problems?		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Spring 1	Year 2		
Strand	Pictures with Numbers – Number Sense		
Domain	<ol style="list-style-type: none"> 1. Number – number and place value 2. Number – multiplication and division 3. Number - fractions 4. Statistics 		
Key Concepts	Estimating Odd and even Displaying information	Key Vocabulary	estimate, odd, even, quantity, measures, fractions, numerator, denominator, representation, number line, Carroll diagram, properties, pictograms, tally charts, block diagrams, simple tables, category, total
Objectives	<ul style="list-style-type: none"> • Estimate a quantity by comparing with a known quantity and using fractions. • Identify, represent and estimate numbers using different representations, including the number line. • Identify and use odd and even numbers. • Use a Carroll diagram to sort numbers and objects according to their properties. • Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. • Identify how many in a category and sort categories by quantity. • Ask and answer questions about totalling and comparing categorical data. 		
Key questions	<p>Can I estimate quantities and measures and investigate odd and even numbers?</p> <p>Can I display information about quantity?</p>		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Spring 1	Year 2		
Strand	Multiplying and Dividing – Multiplicative Reasoning		
Domain	<ol style="list-style-type: none"> 1. Number - Number and place value 2. Number – Multiplication and division 3. Measurement 		
Key Concepts	Repeated addition and subtraction Multiplication tables and arrays Division Five-minute times	Key Vocabulary	repeated addition, repeated subtraction, odd, even, multiplication, division, equals, commutative, arrays, mental methods, multiplication facts, division facts, minute, hour
Objectives	<ul style="list-style-type: none"> • Recall and use multiplication and division facts for the two, five and ten multiplication tables, including recognising odd and even numbers. • Calculate mathematical statements for multiplication and division within the times tables and write them using the multiplication (\times), and division (\div) and equals (=) signs. • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. • Recall and use multiplication and division facts for the two, five and ten multiplication tables. • Show that division of one number by another cannot be done in any order. • Tell and write the time to five minutes. • Know the number of minutes in an hour. 		
Key questions	Can I use repeated addition and subtraction to multiply and divide? Can I multiply and divide 1 and 2-digit numbers using a variety of approaches? Can I tell the time to the nearest five minutes?		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Spring 2	Year 2		
Strand	Parts of a Whole – Number Sense		
Domain	<ol style="list-style-type: none"> 1. Number – addition and subtraction 2. Number – fractions 3. Measurement 		
Key Concepts	Partitioning to add and subtract (TO and O) Partitioning to add and subtract (TO and TO) Fractions of a whole Temperature	Key Vocabulary	parts, wholes, tens, ones, add, subtract, fractions, numerator, denominator, digits, estimate, represent, inverse, relationship, equivalence, measure, temperature, thermometer, degrees, Celsius, equal, record
Objectives	<ul style="list-style-type: none"> • Recognise the place value of each digit in a 2-digit number (tens, ones). • Add and subtract a 2-digit number and ones. • Identify, represent and estimate numbers using different representations. • Recognise the place value of each digit in a 2-digit number (tens, ones). • Use the inverse relationship between addition and subtraction to check calculations and solve missing number problems. • Recognise halving and doubling as the inverse of each other. • Recognise, find, name and write fractions $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity. • Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. • Choose and use appropriate standard units to estimate and measure temperature ($^{\circ}\text{C}$) to the nearest appropriate unit, using thermometers. • Compare and order numbers from 0 up to 100; use and = signs. • Read and write numbers to at least 100 in numerals and in words. • Use place value and number facts to solve problems. 		
Key questions	Can I use partitioning to add 1- and 2-digit numbers? Can I investigate fractions of a whole? Can I measure and record temperatures?		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Spring 2	Year 2		
Strand	More Addition and Subtraction – Additive Reasoning		
Domain	<ol style="list-style-type: none"> 1. Number- Addition and Subtraction 2. Number – Number and Place Value 		
Key Concepts	Adding and Subtracting by Sequencing Adding and subtracting a near multiple of ten Numbers in words	Key Vocabulary	add, subtract, sequence, multiples, tens, mental method, written method, numerals, words, value
Objectives	<ul style="list-style-type: none"> • Add and subtract numbers using concrete objects, pictorial representations and mentally, including two 2-digit numbers. • Solve problems with addition and subtraction, applying their increasing knowledge of mental and written methods. • Recall and use addition and subtraction facts to ten fluently. • Add and subtract numbers using concrete objects, pictorial representations and mentally, including two 2-digit numbers. • Solve problems with addition and subtraction, applying their increasing knowledge of mental and written methods. • Read and write numbers to at least 100 in numerals and words. • Recognise the place value of each digit in a 2-digit number (tens, ones). 		
Key questions	Can I add and subtract by sequencing? Can I add and subtract near multiples of 10 and check calculations?		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Summer 1	Year 2		
Strand	Exploring Shapes – Geometric Reasoning		
Domain	<ol style="list-style-type: none"> 1. Geometry – properties of shape 2. Geometry – position and direction 3. Measurement 		
Key Concepts	Exploring faces Patterns and shapes	Key Vocabulary	3-D, 2-D, faces, patterns, shape, grouping, pairing, pyramid, prism, tessellation, properties
Objectives	<ul style="list-style-type: none"> • Explore and compare 3-D shapes including grouping 3-D shapes by their 2-D faces. • Compare and sort common 2-D and 3-D shapes and everyday objects. • Explore same and different pairs of shapes including pyramid and prism. • Explore how 2-D and 3-D shapes fit together. • Explore simple tessellations. • Explore 2-D and 3-D artists and the shapes they use. • Compare and sort common 2-D and 3-D shapes and everyday objects. 		
Key questions	<p>Can I sort 3-D shapes by their properties?</p> <p>Can I explore shape patterns and tessellation?</p>		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Summer 1	Year 2		
Strand	Reading Scales and Fractions – Number Sense		
Domain	<ol style="list-style-type: none"> Number – fractions Measurement 		
Key Concepts	Millilitres Time intervals Thirds	Key Vocabulary	fractions, numerator, denominator, millilitres, volume, capacity, greater than, less than, equal to, category, quantity, compare, sequence, interval, minutes, hour, length, shape, divide, share, split
Objectives	<ul style="list-style-type: none"> Estimate and measure capacity in millilitres using measuring vessels. Compare and order volume/capacity and record the results using $>$, $<$ and $=$. Add and subtract 2-digit numbers using concrete objects, pictorial representations, and mentally in the context of measures. Interpret and construct simple tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Compare and sequence intervals of time. Tell and write the time to five minutes. Know and use the fact that there are 60 minutes in an hour. Recognise, find, name and write fractions of a length, shape, set of objects or quantity – focus on $\frac{1}{3}$, including writing and solving $\frac{1}{3}$ of $x = y$. 		
Key questions	Can I measure and record volume in millilitres? Can I compare and sequence time intervals? Can I divide a whole into thirds?		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Summer 1	Year 2		
Strand	Solving Problems – Additive Reasoning		
Domain	1. Number – addition and subtraction 2.		
Key Concepts	Add or subtract? Checking addition and subtraction Solving missing number problems Adding in columns	Key Vocabulary	add, subtract, bar model, quantities, measures, mental method, written method, inverse, relationship, check, missing number, columns, value
Objectives	<ul style="list-style-type: none"> • Use the bar model to solve problems with addition and subtraction, using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increased knowledge of mental and written methods. • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations. • Solve problems with addition and subtraction, using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increased knowledge of mental and written methods. • Recognise and use the inverse relationship between addition and subtraction and use this to solve missing number problems. • Record addition in columns to support place value and prepare for formal written methods with larger numbers. 		
Key questions	<p>Can I model real-life situations as addition or subtraction calculations?</p> <p>Can I check solutions to addition and subtraction calculations and solve missing number problems?</p> <p>Can I solve addition problems using the column method?</p>		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Summer 2	Year 2		
Strand	Counting in Threes, Fractions and Time – Multiplicative Reasoning		
Domain	<ol style="list-style-type: none"> 1. Number – number and place value 2. Number – multiplication and division 3. Number – fractions 4. Measurement 		
Key Concepts	Multiplication table for 3 Fractions and scaling Calculating time	Key Vocabulary	multiplication table, counting, multiplication, division, scaling, equal to, odd, even, arrays, repeated addition, mental methods, multiplication facts, division facts, fractions, numerator, denominator, equivalence, length, shape, hours, sequence, intervals
Objectives	<ul style="list-style-type: none"> • Calculate multiplication and division statements for three and write them using the multiplication (\times), division (\div) and equals (=) signs. • Begin to recall and use multiplication and division facts for three including recognising odd and even numbers. • Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. • Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity. • Write simple fractions, e.g. $\frac{1}{2}$ of $6 = 3$, and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. • Begin to recognise fractions as division • Know the number of hours in a day. • Compare and sequence intervals of time. 		
Key questions	<p>Can I count in threes and use the 3 times table?</p> <p>Can I compare and order fractions and use them in scaling problems?</p> <p>Can I solve problems involving time intervals?</p>		

Maths Yearly Topic Overview – Year 2



Subject: **Maths**

Term: Summer 2	Year 2		
Strand	Moving Around – Geometric Reasoning		
Domain	<ol style="list-style-type: none"> 1. Geometry – Position and Direction 2. Number – Fractions 3. Measurement 		
Key Concepts	Turns Estimating lengths and distances Directions	Key Vocabulary	turns, angles, right angles, estimate, length, distance, measure, clockwise, anti-clockwise, quarter, half, three-quarters, position, direction, movement, right, left, up, down, fractions, numerator, denominator
Objectives	<ul style="list-style-type: none"> • Identify quarter turns and compare right angles with quarter turns. • Describe position, direction and movement, including moving clockwise and anticlockwise, quarter, half and three-quarter turns. • Estimate and measure length and distance. • Use mathematical vocabulary to describe position, direction and movement. • Give and follow directions to navigate a course. 		
Key questions	Can I describe turns and estimate lengths and distance? Can I follow and write directions?		