

St. Mary's CE Primary School



Curriculum Map: Overview for Mathematics

Plan: Maths Mastery (Power Maths)

Year: Year 2

Autumn Term			
Unit	Strands	NC Objectives	Lesson progression
1	Number and place value	<ol style="list-style-type: none"> Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s Identify, represent and estimate numbers using different representations, including the number line Recognise the place value of each digit in a 2-digit number (10s, 1s) Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs Count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward 	<ol style="list-style-type: none"> Counting objects to 100 Representing numbers to 100 Tens and ones (1) Tens and ones (2) Representing numbers on a place value grid Comparing numbers (1) Comparing numbers (2) Ordering Numbers Counting in 2s, 5s and 10s Counting in 3s
2	Number - addition and subtraction	<ol style="list-style-type: none"> Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures Add and subtract numbers using concrete objects, 	<ol style="list-style-type: none"> Related facts - addition and subtraction Using number facts to check calculations Comparing number sentences Finding related Facts Making number bonds to 100 Adding and subtracting 1s Finding 10 more and 10 less Adding and subtracting 10s Adding a 2-digit and 1-digit number (1) Adding a 2-digit and 1-digit number (2) Subtracting a 1-digit number from a 2-digit number (1)

		<p>pictorial representations, and mentally, including: a 2-digit number and 1s</p> <ol style="list-style-type: none"> Count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 10s Solve problems with addition and subtraction: applying their increasing knowledge of mental and written methods 	12. Subtracting a 1-digit number from a 2-digit number (2)
3	Number - addition and subtraction	<ol 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 Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures 	<ol style="list-style-type: none"> Adding two 2-digit numbers (1) Adding two 2-digit numbers (2) Subtracting a 2-digit number from another 2-digit number (1) Subtracting a 2-digit number from another 2-digit number (2) Subtracting a 2-digit number from another 2-digit number (3) Subtracting a 2-digit number from another 2-digit number (4) Adding three 1-digit numbers Solving word problems - the bar model (1) Solving word problems - the bar model (2)
4	Measurement - money	<ol style="list-style-type: none"> Recognise and use signs for pounds (£) and pence (p); combine amounts to make a particular value Recognise and know the value of different denominations of coins and notes Find different combinations of coins that equal the same amounts of money Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change 	<ol style="list-style-type: none"> Counting money - coins Counting money - notes Counting money - coins and notes Showing equal amounts of money (1) Showing equal amounts of money (2) Comparing amounts of money Calculating the total amount Finding change Solving two-step word problems
5	Number - multiplication and division	<ol style="list-style-type: none"> Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including 	<ol style="list-style-type: none"> Making equal groups Multiplication as equal groups

		<p>problems in contexts</p> <p>2. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs</p> <p>3. Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p>	<p>3. Adding equal groups</p> <p>4. Multiplication sentences</p> <p>5. Using arrays</p> <p>6. 2 times-table</p> <p>7. 5 times-table</p> <p>8. 10 times-table</p> <p>9. Solving word problems - multiplication</p>
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Spring Term			
Unit	Strands	NC Objectives	Lesson progression
6	Number - multiplication and division	<ol style="list-style-type: none"> 1. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts 2. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs 3. Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers 	<ol style="list-style-type: none"> 1. Making equal groups 2. Sharing and grouping 3. Dividing by 2 4. Odd and even numbers 5. Dividing by 5 6. Dividing by 10 7. Bar modelling - grouping 8. Bar modelling - sharing 9. Solving word problems - division
7	Statistics	<ol style="list-style-type: none"> 1. Interpret and construct simple pictograms, tally charts, block diagrams and simple tables 2. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity 3. Ask and answer questions about totalling and comparing categorical data 	<ol style="list-style-type: none"> 1. Making tally charts 2. Creating pictograms (1) 3. Creating pictograms (2) 4. Interpreting pictograms (1) 5. Interpreting pictograms (2) 6. Block diagrams 7. Solving word problems
8	Measurement - length and height	<ol style="list-style-type: none"> 1. Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels 2. Compare and order lengths, mass, volume/ capacity and record the results using $>$, $<$ and $=$ 3. Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures 	<ol style="list-style-type: none"> 1. Measuring in centimetres 2. Measuring in metres 3. Comparing lengths 4. Ordering lengths 5. Solving word problems - length

9	Geometry - properties of shapes	<ol style="list-style-type: none"> 1. Compare and sort common 2D and 3D shapes and everyday objects 2. Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line 3. Order and arrange combinations of mathematical objects in patterns and sequences 4. Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces 	<ol style="list-style-type: none"> 1. Recognising 2D and 3D shapes 2. Drawing 2D shapes 3. Counting sides on 2D shapes 4. Counting vertices on 2D shapes 5. Finding lines of symmetry 6. Sorting 2D shapes 7. Making patterns with 2D shapes 8. Counting faces on 3D shapes 9. Counting edges on 3D shapes 10. Counting vertices on 3D shapes 11. Sorting 3D shapes 12. Making patterns with 3D shapes
10	Number - fractions	<ol style="list-style-type: none"> 1. Recognise, find and name a half as one of two equal parts of an object, shape or quantity 2. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity 3. 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 4. Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ <p>Non-statutory guidelines: Pupils should count in fractions up to 10, starting from any number</p>	<ol style="list-style-type: none"> 1. Introducing whole and parts 2. Making equal parts 3. Recognising a half ($\frac{1}{2}$) 4. Finding a half 5. Recognising a quarter ($\frac{1}{4}$) 6. Finding a quarter 7. Unit fractions 8. Understanding other fractions 9. $\frac{1}{2}$ and $\frac{2}{4}$ 10. Finding $\frac{3}{4}$ 11. Understanding a whole 12. Understanding whole and parts 13. Counting in halves 14. Counting in quarters

Summer Term			
Unit	Strands	NC Objectives	Lesson progression
11	Geometry - position and direction	<ol style="list-style-type: none"> 1. Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) 2. Order and arrange combinations of mathematical objects in patterns and sequences 	<ol style="list-style-type: none"> 1. Describing movement 2. Describing turns 3. Describing movement and turns 4. Making patterns with shapes
12	Number and place value (addition and subtraction)	<ol style="list-style-type: none"> 1. Use place value and number facts to solve problems 2. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems 3. Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures 4. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts 5. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot 	<ol style="list-style-type: none"> 1. My way, your way! 2. Using number facts 3. Using number facts and equivalence 4. Using a 100 square 5. Getting started 6. Missing numbers 7. Mental addition and subtraction (1) 8. Mental addition and subtraction (2) 9. Efficient subtraction 10. Solving problems - addition and subtraction 11. Solving problems - multiplication and division 12. Solving problems using the four operations
13	Measurement - time	<ol style="list-style-type: none"> 1. Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times 2. Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times 3. Know the number of minutes in an hour and the number of hours in a day 4. Compare and sequence intervals of time 	<ol style="list-style-type: none"> 1. Telling and writing time to the hour and the half hour 2. Telling time to the quarter hour 3. Telling time to 5 minutes 4. Minutes in an hour 5. Finding durations of time 6. Comparing durations of time 7. Finding the end time 8. Finding the start time 9. Hours in a day

14	Measurement - weight, volume and temperature	<ol style="list-style-type: none"> 1. Compare and order lengths, mass, volume/capacity and record the results using >, < and = 2. Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels 	<ol style="list-style-type: none"> 1. Comparing mass 2. Measuring mass in grams (1) 3. Measuring mass in grams (2) 4. Measuring mass in kilograms 5. Comparing volume 6. Measuring volume in millilitres (1) 7. Measuring volume in millilitres (2) 8. Measuring volume in litres 9. Measuring temperature using a thermometer 10. Reading thermometers
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