St. Mary's CE Primary School

Curriculum Map: Overview for Mathematics

Plan: Maths Mastery (Power Maths)

Year: Year 3

Autumn Term			
Unit	**Strands**	**NC Objectives**	**Lesson Progression**
1	Number: Number and place value	1. Recognise the place value of each digit in a three digit number 2. Read and write numbers up to 1,000 in numerals and in words 3. Identify, represent and estimate numbers using different representations 4. Compare and order numbers up to 1,000 5. Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number 6. Solve number problems and practical problems involving these ideas	1. Counting in 100s 2. Representing numbers to 1,000 3. 100s, 10s and 1s (1) 4. 100s, 10s and 1s (2) 5. The number line to 1,000 (1) 6. The number line to 1,000 (2) 7. Finding 1, 10 and 100 more or less 8. Comparing numbers to 1,000 (1) 9. Comparing numbers to 1,000 (2) 10. Ordering numbers to 1,000 11. Counting in 50s
2	Number: Addition and subtraction	1. Add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds 2. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction 3. Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	1. Adding and subtracting 100s 2. Adding and subtracting a 3-digit number and 1s 3. Adding a 3-digit number and 1s 4. Subtracting 1s from a 3-digit number 5. Adding and subtracting a 3-digit number and 10s 6. Adding a 3-digit number and 10s 7. Subtracting 10s from a 3-digit number 8. Adding and subtracting a 3-digit and 2-digit number 9. Adding a 3-digit and 2-digit number

			10. Subtracting a 2-digit number from a 3-digit number
3	Number: Addition and subtraction	1. Add and subtract numbers mentally, including: a three-digit number and ones, a three-digit number and tens, a three-digit number and hundreds 2. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction 3. Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction 4. Estimate the answer to a calculation and use inverse operations to check answers	1. Addition and subtraction patternsMultiplying by 3 2. Adding two 3-digit numbers (1)3 times-table 3. Adding two 3-digit numbers (2)Dividing by 4 4. Subtracting a 3-digit number from a 3-digit number 5. Subtracting a 3-digit number from a 3-digit number (2)8 6. Estimating answers to additions and subtractions 7. Checking strategies 8. Problem solving – addition and subtraction (1) 9. Problem solving – addition and subtraction (2)Related
4	Number – multiplication and division	1. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods 2. Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables 3. Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects	1. Multiplication – equal grouping 2. Multiplying by 3 3. Dividing by 3 4. 3 times-table 5. Multiplying by 4 6. Dividing by 4 7. 4 times-table 8. Multiplying by 8 9. Dividing by 8 10. 8 times-table 11. Problem solving – multiplication and division (1) 12. Problem solving – multiplication and division (2) 13. Understanding divisibility (1) 14. Understanding divisibility (2) 15. Related facts – multiplication and division

Spring Term			
Unit	Strands	NC Objectives	Lesson Progression
5	Number – multiplication and division	1. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods 2. Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects 3. Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign	1. Comparing multiplication and division statements (1) 2. Related multiplication calculations 3. Related multiplication and division calculations 4. Comparing multiplication and division statements (2) 5. Multiplying a 2-digit number by a 1-digit number (1) 6. Multiplying a 2-digit number by a 1-digit number (2) 7. Multiplying a 2-digit number by a 1-digit number (3) 8. Dividing a 2-digit number by a 1-digit number (1) 9. Dividing a 2-digit number by a 1-digit number (2) 10. Dividing a 2-digit number by a 1-digit number (3) 11. How many ways? 12. Problem solving - mixed problems (1) 13. Problem solving - mixed problems (2) 14. Problem solving - mixed problems (3)
6	Measurement - Money	1. Add and subtract amounts of money to give change, using both £ and p in practical contexts	1. Pounds and pence 2. Converting pounds and pence 3. Adding money 4. Subtracting amounts of money 5. Problem solving - money
7	Statistics	1. Solve one-step and two-step questions [for example, 'how many more?' and 'how many fewer?'] using information presented in scaled bar charts and pictograms and tables	1. Pictograms (1) 2. Pictograms (2) 3. Bar charts (1) 4. Bar charts (2) 5. Tables
8	Measurement - Length	1. Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)	1. Measuring length (1) 2. Measuring length (2)

		2. Measure the perimeter of simple 2-d shapes	3. Equivalent lengths - metres and centimetres
			4. Equivalent lengths - centimetres and millimetres
			5. Comparing lengths
			6. Adding lengths
			7. Subtracting lengths
			8. Measuring the perimeter (1)
			9. Measuring the perimeter (2)
			10. Problem solving - length (1)
			11. Problem solving - length (2)
9	Number – fractions	1. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators 2. Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 3. Compare and order unit fractions, and fractions with the same denominators 4. Solve problems that involve all of the above	1. Unit and non unit fractions 2. Making the whole 3. Tenths (1) 4. Tenths (2) 5. Fractions as numbers (1) 6. Fractions as numbers (2) 7. Fractions as numbers (3) 8. Fractions of a set of objects (1) 9. Fractions of a set of objects (2) 10. Fractions of a set of objects (3) 11. Problem solving - fractions

Summer Term			
Unit	Strands	NC Objectives	Lesson Progression
10	Number –	1. Recognise and show, using diagrams, equivalent fractions with small denominators 2. Compare and order unit fractions, and fractions with the same denominators 3. Add and subtract fractions with the same denominator within one whole (for example, 5/ 7 + 1/ 7 = 6/ 7) 4. Solve problems that involve all of the above 5. Recognise and use fractions as numbers: unit fractions and nonunit fractions with small denominators 6. Recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators	1. Equivalent fractions (1) 2. Equivalent fractions (2) 3. Equivalent fractions (3) 4. Comparing fractions 5. Comparing and ordering fractions 6. Adding fractions 7. Subtracting fractions 8. Problem solving – adding and subtracting fractions 9. Problem solving – fractions of measures
11	Measurement: Time	1. Know the number of seconds in a minute and the number of days in each month, year and leap year 2. 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, am/pm, morning, afternoon, noon and midnight 3. Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24- hour clocks 4. Compare durations of events (for example to calculate the time taken by particular events or tasks)	1. Months and years 2. Hours in a day 3. Estimating time 4. Telling time to 5 minutes 5. Telling time to the minute (1) 6. Telling time to the minute (2) 7. Telling time to the minute (3) 8. Finding the duration 9. Comparing duration 10. Finding start and end
12	Geometry –- Angles and properties of shapes	1. Recognise angles as a property of shape or a description of a turn 2. Identify right angles, recognise that two right angles make a halfturn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle Geometry – properties of shapes Unit 12 Angles and properties of	1. Turns and angles 2. Right angles in shapes 3. Comparing angles 4. Drawing accurately 5. Types of line (1) 6. Types of line (2)

		shapes 2 Right angles in shapes Recognise angles as a property of shape or a description of a turn Identify right angles, 3. Recognise angles as a property of shape or a description of a turn 4. Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them 5. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines	7. Recognising and describing 2D shapes 8. Recognising and describing 3D shapes 9. Constructing 3D shapes
13	Measurement - Mass	1. Measure, compare, add and subtract: lengths (m/ cm/mm); mass (kg/g); volume/capacity (l/ml)	1. Measuring mass (1) 2. Measuring mass (2) 3. Measuring mass (3) 4. Comparing masses 5. Adding and subtracting masses 6. Problem solving – mass
17	Measurement - Capacity	1. Measure, compare, add and subtract: lengths (m/ cm/mm); mass (kg/g); volume/capacity (l/ml	1. Measuring capacity (1) 2. Measuring capacity (2) 3. Measuring capacity (3) 4. Comparing capacities 5. Adding and subtracting capacities 6. Problem solving – capacity