St Mary's Catholic Primary School

Curriculum Mapping – Y3 (**National Curriculum Objectives** WhiteRose Small Steps **NCETM and DfE Ready-to-progress Criteria**)

AUTUMN TERM **SPRING TERM** **SUMMER TERM**

Number: Place Value	Number: Addition and Subtraction	Number: Multiplication and Division A	Number: Multiplication and Division B
• **Identify, represent and estimate numbers using different representations.** • **Recognise the place value of each digit in a 3-digit number (hundreds, tens, ones).** • **Count from zero in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.** • **Read and write numbers up to 1,000 in numerals and words.** • **Compare and order numbers up to 1,000.** • **Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.** • **Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning.** • **Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.** • **Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.** 1. Represent numbers to 100 2. Partition numbers to 100 3. Number line to 100 4. Hundreds 5. Represent numbers to 1,000 6. Partition numbers to 1,000 7. Flexible partitioning of numbers to 1,000 8. Hundreds, tens and ones 9. Find 1, 10 or 100 more or less 10. Number line to 1,000 11. Estimate on a number line to 1,000 12. Compare numbers to 1,000 13. Order numbers to 1,000 14. Count in 50s	• **Add and subtract numbers mentally, including a 3-digit number and ones, a 3-digit number and tens, a 3-digit number and hundreds.** • **Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.** • **Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.** • **Estimate the answer to a calculation and use inverse operations to check answers.** • **Secure fluency in addition and subtraction facts that bridge 10, through continued practice.** • **Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10)** • **Calculate complements to 100.** • **Add and subtract up to three-digit numbers using columnar methods.** • **Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.** 1. Apply number bonds within 10 2. Add and subtract 1s 3. Add and subtract 10s 4. Add and subtract 100s 5. Spot the pattern (add and subtract 1s, 10s and 100s) 6. Add 1s across a 10 7. Add 10s across a 100 8. Subtract 1s across a 10 9. Subtract 10s across a 100 10. Make connections (between adding and subtracting 1s and 10s across a 10 and a 100) 11. Add two numbers (no exchange) 12. Subtract two numbers (no exchange) 13. Add two numbers across a 10 14. Add two numbers across a 100	• **Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-digit numbers, using mental and progressing to formal written methods.** • **Show that multiplication of two numbers can be done in any order (commutative) and division on one number by another cannot (Y2).** • **Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward (Y2)** • **Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Y2)** • **Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.** • **Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.** • **Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10)** • **Apply known multiplication and division facts to solve contextual problems with different structures, including quotative and partitive division.** 1. **Multiplication – equal groups** 2. Use arrays 3. Multiples of 2 4. Multiples of 5 and 10 5. Sharing and grouping 6. Multiply by 3 7. Divide by 3 8. The 3 times-table 9. Multiply by 4 10. Divide by 4 11. The 4 times-table 12. Multiply by 8 13. Divide by 8	• **Recall and use multiplication facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers (Y2).** • **Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-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 and correspondence problems in which n objects are connected to m objects.** • **Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.** • **Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.** • **Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10)** • **Apply known multiplication and division facts to solve contextual problems with different structures, including quotative and partitive division.** 1. Multiples of 10 2. Related calculations (using known facts) 3. Reasoning about multiplication (e.g. comparing 6 x 3 to 6 x 2 without doing the calculation) 4. Multiply a 2-digit number by a 1-digit number – no exchange 5. Multiply a 2-digit number by a 1-digit number – with exchange 6. Link multiplication and division 7. Divide a 2-digit number by a 1-digit number – no exchange

St Mary's Catholic Primary School

	15. Subtract two numbers across a 10 16. Subtract two numbers across a 100 17. Add 2-digit and 3-digit numbers 18. Subtract a 2-digit number from a 3-digit number 19. Complements to 100 20. Estimate answers 21. Inverse operations 22. Make decisions (about operations and appropriate methods)	14. The 8 times-table 15. The 2, 4 and 8 times-tables	8. Divide a 2-digit number by a 1-digit number – flexible partitioning 9. Divide a 2-digit number by a 1-digit number – with remainders 10. Scaling 11. How many ways? (correspondence problems)
Measurement: Length and Perimeter	**Number: Fractions A**	**Measurement: Mass and Capacity**	**Number: Fractions B**
• **Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).** • **Measure the perimeter of simple 2-D shapes.** • **Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.** 1. Measure in metres and centimetres 2. Measure in millimetres 3. Metres, centimetres and millimetres 4. Equivalent lengths (metres and centimetres) 5. Equivalent lengths (centimetres and millimetres) 6. Compare lengths 7. Add lengths 8. Subtract lengths 9. What is perimeter? 10. Measure perimeter 11. Calculate perimeter	• **Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.** • **Compare and order unit fractions, and fractions with the same denominators.** • **Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).** • **Recognise and show, using diagrams, equivalent fractions with small denominators.** • **Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.** • **Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.** • **Reason about the location of any fraction within 1 in the linear number system.** 1. Understand the denominators of unit fractions 2. Compare and order unit fractions 3. Understand the numerators of non-unit fractions 4. Understand the whole 5. Compare and order non-unit fractions 6. Fractions and scales 7. Fractions on a number line 8. Count in fractions on a number line 9. Equivalent fractions on a number line 10. Equivalent fractions as bar models	• **Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).** • **Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.** 1. Use scales 2. Measure mass in grams 3. Measure mass in kilograms and grams 4. Equivalent masses (kilograms and grams) 5. Compare mass 6. Add and subtract mass 7. Measure capacity and volume in millilitres 8. Measure capacity and volume in litres and millilitres 9. Equivalent capacities and volumes (litres and millilitres) 10. Compare capacity and volume) 11. Add and subtract capacity and volume	• **Add and subtract fractions with the same denominator within one whole.** • **Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.** • **Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.** • **Find unit fractions of quantities using known division facts (multiplication tables fluency).** • **Add and subtract fractions with the same denominator, within 1.** 1. Add fractions 2. Subtract fractions 3. Partition the whole 4. Unit fractions of a set of objects 5. Reasoning with fractions of amounts (in context, including multi-step calculations)
Measurement: Money	**Measurement: Time**	**Geometry: Shape**	**Statistics**
• **Add and subtract amounts of money to give change, using both £ and p in practical contexts.** 1. Pounds and pence 2. Convert pounds and pence 3. Add money	• **Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.** • **Estimate and read time with increasing accuracy to the nearest minute; record and compare time**	• **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;**	• **Interpret and present data using bar charts, pictograms and tables.** • **Solve one-step and two-step questions using information presented in scaled bar charts and pictograms and table.**

St Mary's Catholic Primary School

4. Subtract money 5. Find change	**in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight.** • **Know the number of seconds in a minute and the number of days in each month, year and leap year.** • **Compare durations of events.** • **Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.** 1. Roman numerals to 12 2. Tell the time to 5 minutes 3. Tell the time to the minute 4. Read time on a digital clock 5. Use am and pm 6. Years, months and days 7. Days and hours 8. Hours and minutes – start and end times 9. Hours and minutes – durations 10. Minutes and seconds 11. Units of time (sense of time) 12. Solve problems with time	**identify whether angles are greater than or less than a right angle.** • **Measure the perimeter of simple 2-D shapes.** • **Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them.** • **Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).** • **Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.** • **Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.** • **Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.** • **Draw polygons by joining marked points, and identify parallel and perpendicular sides.** 1. Turns and angles (Y2) 2. Right angles 3. Compare angles 4. Measure and draw lines to the nearest millimetre 5. Horizontal and vertical 6. Parallel and perpendicular 7. Recognise and describe 2-D shapes 8. Draw polygons 9. Recognise and describe 3-D shapes 10. Make 3-D shapes	• **Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.** 1. Interpret pictograms 2. Draw pictograms 3. Interpret bar charts 4. Draw bar charts 5. Collect and represent data 6. Two-way tables