## St Mary's Catholic Primary School and Nursery <br> Maths Curriculum Map

|  | Autumn $1 \quad$ Autumn 2 | Spring 1 | Summer 1 Summer 2 |
| :---: | :---: | :---: | :---: |
| Nursery | Counting <br> Recite numbers to 10 <br> Touching each item saying one number for each item (stable order) <br> Noticing numerals (number symbols) <br> Beginning to subitise one and two objects <br> with support <br> Experiment with symbols and mark making <br> Shape <br> Talk about and explore 2D and 3D shapes <br> Positional language <br> Finding my way round a familiar environment <br> Measure <br> Exploring differences in size, length, weight and capacity in independent play <br> Patterns <br> What happens next - the pattern of everyday routines | Counting <br> Recite numbers to 15 <br> Say one number for each item in order Know that the last number reached when counting a set of objects tells you how many there are in total (cardinal principle) Recognising numbers of personal significance <br> Visually comparing two groups when one group is at least double the size of the other <br> Experiment with symbols and mark making Compare quantities using vocabulary including more than and fewer than. <br> Shape <br> Finding and naming 2D shapes in the environment <br> Positional language <br> Respond to some spatial and positional language <br> Measure <br> Using describing words more, lots, full, empty, same, big, fat, thin to describe quantities and amounts | Counting <br> Recite numbers to 20 <br> Beginning to link numerals and amounts showing the right number of objects to match the numeral, up to 5 <br> Recognising numbers of personal significance <br> Representing numbers 0-5 using my fingers Compare quantities using vocabulary including more than and fewer than. <br> Shape <br> Using 2D and 3D shapes to create pictures and models <br> Positional language <br> Practically explore positional language <br> Measure <br> Finding the longer/shorter, heavier/lighter and more/less full of two items <br> Patterns <br> Recognising a repeating pattern and discussing using informal language |

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Maths Curriculum Map

|  |  | Using the language of first and then (time) <br> Patterns <br> Identify patterns all around - copying and create ABAB patterns |  |
| :---: | :---: | :---: | :---: |
| Reception | Getting to know you <br> Daily Routines <br> Counting songs <br> Just like me <br> Sorting <br> Comparing <br> Exploring pattern <br> It's me 123 <br> Exploring numbers to 3 <br> Properties of shapes <br> Light and Dark <br> Exploring numbers to 5 <br> Properties of shapes | Alive in 5 <br> Concept of 0 <br> Comparing numbers to 5 <br> Composition of numbers to 5 <br> Compare mass \& capacity <br> Growing 6,7,8 <br> 6, 7 \& 8 <br> Making pairs <br> Combining 2 groups <br> Length, height and time <br> Building 9 \& 10 <br> 9 \& 10 <br> Comparing numbers to 10 <br> Bonds to 10 <br> 3D shape and pattern | To 20 and beyond <br> Building numbers beyond 10 <br> Counting patterns beyond 10 <br> Spatial reasoning, match, rotate, manipulate <br> First then now <br> Adding more <br> Taking away <br> Spatial reasoning <br> Compose and decompose <br> Find my pattern <br> Doubling <br> Sharing and grouping <br> Even and odd <br> Spatial reasoning <br> Visualize and build <br> On the move <br> Deepening understanding patterns and relationships <br> Spatial reasoning <br> Mapping - positional language |

# St Mary's Catholic Primary School and Nursery <br> Maths Curriculum Map 



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|  | name 2D shapes; sort 2D shapes; patterns with 2D and 3D shapes. <br> Consolidation | Small steps include: Compare lengths and heights; Measure length using objects; Measure length in centimetres <br> Measurement: Mass and volume <br> Small steps include: Heavier and lighter; Measure mass; Compare mass; Full and empty; Compare volume; Measure capacity; Compare capacity |  |
| :---: | :---: | :---: | :---: |
| Year 2 | Number: Place Value <br> Small steps include: Numbers to 20; Count objects to 100 by making 10s; Recognise tens and ones; Use a place value chart; Partition numbers to 100; Write numbers to 100 in words; Flexibly partition numbers to 100; Write numbers to 100 in expanded form; 10s on the number line to 100; 10s and 1s on the number line to 100; Estimate numbers on a number line; Compare objects; Compare numbers; Order objects and numbers; Count in $2 \mathrm{~s}, 5$ s and 10s; Count in 3s. <br> Number: Addition and subtraction <br> Small steps include: Bonds to 10; Fact families - addition and subtraction bonds within 20; Related facts; Bonds to 100 (tens); Add and subtract 1s; Add by making 10; Add three 1-digit numbers; Add to the next 10; | Measurement: Money <br> Small steps include: Count money - pence Step 2 Count money - pounds (notes and coins) Step 3 Count money - pounds and pence Step 4 Choose notes and coins Step 5 Make the same amount Step 6 Compare amounts of money Step 7 Calculate with money Step 8 Make a pound; Find change Step 10 Two-step problems <br> Number: Multiplication and Division <br> Small steps include: Recognise equal groups; Make equal groups; Add equal groups; Introduce the multiplication symbol; Multiplication sentences; Use arrays; Make equal groups - grouping; Make equal groups - sharing; The 2 timestable; Divide by 2; Doubling and halving; Odd and even numbers; The 10 times- | Number: Fractions <br> Small steps include: summer content coming in March <br> Measurement: Time <br> Small steps include: summer content coming in March <br> Statistics <br> Small steps include: summer content coming in March <br> Geometry: Position and direction <br> Small steps include: summer content coming in March <br> Consolidation |

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|  | Add across a 10; Subtract across 10; Subtract from a 10; Subtract a 1-digit number from a 2-digit number (across a 10); 10 more, 10 less; Add and subtract 10s; Add two 2-digit numbers (not across a 10); Add two 2-digit numbers (across a 10); Subtract two 2-digit numbers (not across a 10); Subtract two 2-digit numbers (across a 10); Mixed addition and subtraction; Compare number sentences; Missing number problems. <br> Geometry: Shape <br> Small steps include: Recognise 2-D and 3-D shapes; Count sides on 2-D shapes; Count vertices on 2-D shapes; Draw 2-D shapes; Lines of symmetry on shapes; Use lines of symmetry to complete shapes; Sort 2-D shapes; Count faces on 3-D shapes; Count edges on 3-D shapes; Count vertices on 3-D shapes; Sort 3-D shapes; Make patterns with 2-D and 3-D shapes. | table; Divide by 10; The 5 times-table; Divide by 5; The 5 and 10 times-tables <br> Measurement: Length and height <br> Small steps include: Measure in centimetres; Measure in metres; Compare lengths and heights; Order lengths and heights; Four operations with lengths and heights. <br> Measurement: Mass, capacity and temperature. <br> Small steps include: Compare mass; Measure in grams; Measure in kilograms; Four operations with mass; Compare volume and capacity; Measure in millilitres; Measure in litres; Four operations with volume and capacity; Temperature |  |
| :---: | :---: | :---: | :---: |
| Year 3 | Number: Place Value <br> Small steps include: Represent numbers to 100; Partition numbers to 100; Number line to 100; Hundreds; Represent numbers to 1,000; Partition numbers to 1,000 ; Flexible partitioning of numbers to 1,000 ; Hundreds, tens and ones; Find 1, 10 or 100 more or | Number: Multiplication and Division <br> Small steps include: Multiples of 10 Step 2 Related calculations Step 3 Reasoning about multiplication Step 4 Multiply a 2digit number by a 1 -digit number - no exchange Step 5 Multiply a 2 -digit number by a 1-digit number - with exchange Step | Number: Fractions <br> Small steps include: summer content coming in March <br> Measurement: Money <br> Small steps include: summer content coming in March |

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less; Number line to 1,000; Estimate on a number line to 1,000; Compare numbers to 1,000; Order numbers to 1,000; Count in 50s

## Number: Addition and Subtraction

Small steps include: Apply number bonds within 10; Add and subtract 1s; Add and subtract 10s; Add and subtract 100s; Spot the pattern; Add 1s across a 10; Add 10s across a 100; Subtract 1 s across a 10; Subtract 10s across a 100; Make connections; Add two numbers (no exchange); Subtract two numbers (no exchange); Add two numbers (across a 10); Add two numbers (across a 100); Subtract two numbers (across a 10); Subtract two numbers (across a 100); Add 2-digit and 3digit numbers; Subtract a 2-digit number from a 3-digit number; Complements to 100; Estimate answers; Inverse operations; Make decisions.

## Number: Multiplication and Division

Small steps include: Multiplication - equal groups; Use arrays; Multiples of 2; Multiples of 5 and 10; Sharing and grouping; Multiply by 3; Divide by 3; The 3 times-table; Multiply by 4 ; Divide by 4 ; The 4 times-table; Multiply

6 Link multiplication and division Step 7 Divide a 2-digit number by a 1-digit number - no exchange Step 8 Divide a 2-digit number by a 1-digit number - flexible partitioning; Divide a 2-digit number by a 1digit number - with remainders Step 10 Scaling Step 11 How many ways?

## Measurement: Length and perimeter

 Small steps include: Measure in metres and centimetres Step 2 Measure in millimetres Step 3 Measure in centimetres and millimetres Step 4 Metres, centimetres and millimetres Step 5 Equivalent lengths (metres and centimetres) Step 6 Equivalent lengths (centimetres and millimetres) Step 7 Compare lengths Step 8 Add lengths; Subtract lengths Step 10 What is perimeter? Step 11 Measure perimeter Step 12 Calculate perimeter
## Number: Fractions

Small steps include: Understand the denominators of unit fractions; Compare and order unit fractions; Understand the numerators of non-unit fractions; Understand the whole; Compare and order non-unit fractions; Fractions and scales; Fractions on a number line; Count in

## Measurement: Time

Small steps include: summer content coming in March

## Geometry: Shape

Small steps include: summer content coming in March

## Statistics

Small steps include: summer content coming in March

## Consolidation

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|  | by 8 ; Divide by 8 ; The 8 times-table; The 2, 4 and 8 times-tables. | fractions on a number line; Equivalent fractions on a number line; Equivalent fractions as bar models |  |
| :---: | :---: | :---: | :---: |
| Year 4 | Number: Place value Number <br> Small steps include: Represent numbers to 1,000; Partition numbers to 1,000; Number line to 1,000 ; Thousands; Represent numbers to 10,000 ; Partition numbers to 10,000; Flexible partitioning of numbers to 10,000; Find 1, 10, 100, 1,000 more or less; Number line to 10,000; Estimate on a number line to 10,000 ; Compare numbers to 10,000; Order numbers to 10,000; Roman numerals; Round to the nearest 10 ; Round to the nearest 100; Round to the nearest 1,000 ; Round to the nearest 10,100 or 1,000 <br> Decimals: Number Addition and subtraction <br> Small steps include: Add and subtract 1s, 10s, 100s and 1,000s; Add up to two 4-digit numbers - no exchange; Add two 4-digit numbers - one exchange; Add two 4-digit numbers - more than one exchange; <br> Subtract two 4-digit numbers - no exchange; Subtract two 4-digit numbers - one exchange; Subtract two 4-digit numbers more than one exchange; Efficient | Number: Multiplication and division Small steps include: Factor pairs; Use factor pairs; Multiply by 10; Multiply by 100 Divide by 10 ; Divide by 100 ; Related facts - multiplication and division; Informal written methods for multiplication; Multiply a 2 -digit number by a 1 -digit number; Multiply a 3 -digit number by a 1 -digit number; Divide a 2 -digit number by a 1 digit number (1); Divide a 2 -digit number by a 1 -digit number (2); Divide a 3 -digit number by a 1 -digit number; <br> Correspondence problems; Efficient multiplication <br> Measurement: Length and perimeter Small steps include: Measure in kilometres and metres; Equivalent lengths (kilometres and metres); Perimeter on a grid; Perimeter of a rectangle; Perimeter of rectilinear shapes; Find missing lengths in rectilinear shapes; Calculate perimeter of rectilinear shapes; Perimeter of regular polygons; Perimeter of polygons | Number Decimals <br> Small steps include: summer content coming in March <br> Measurement Money <br> Small steps include: summer content coming in March <br> Measurement Time <br> Small steps include: summer content coming in March <br> Consolidation <br> Geometry Shape <br> Small steps include: summer content coming in March <br> Statistics <br> Small steps include: summer content coming in March <br> Geometry Position and direction Small steps include: summer content coming in March |

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|  | subtraction; Estimate answers; Checking strategies <br> Measurement: Area <br> Small steps include: What is area?; Count squares; Make shapes; Compare areas <br> Number: Multiplication and division <br> Small steps include: Multiples of 3; Multiply and divide by 6; 6 times-table and division facts; Multiply and divide by 9; 9 times-table and division facts; The 3, 6 and 9 timestables; Multiply and divide by 7; 7 times-table and division facts; 11 times-table and division facts; 12 times-table and division facts; Multiply by 1 and 0; Divide a number by 1 and itself; Multiply three numbers <br> Consolidation | Number: Fractions <br> Small steps include: Understand the whole; Count beyond 1; Partition a mixed number; Number lines with mixed numbers; Compare and order mixed numbers; Understand improper fractions; Convert mixed numbers to improper fractions; Convert improper fractions to mixed numbers; Equivalent fractions on a number line; Equivalent fraction families; Add two or more fractions; Add fractions and mixed numbers; Subtract two fractions; Subtract from whole amounts; Subtract from mixed numbers <br> Number: Decimals <br> Tenths as fractions; Tenths as decimals; Tenths on a place value chart; Tenths on a number line; Divide a 1-digit number by 10 ; Divide a 2-digit number by 10; Hundredths as fractions; Hundredths as decimals; Hundredths on a place value chart; Divide a 1- or 2-digit number by 100 |  |
| :---: | :---: | :---: | :---: |
| Year 5 | Number: Place value <br> Small steps include: Roman numbers to 1000; numbers to 10,000 ; numbers to 1000,000; numbest o 1,000,000; read and | Number: Multiplication and division <br> Small steps include: multiply up to a 4-digit number by a 1 -digit number; multiply a 2 digit number by a 2 -digit number (area | Geometry: Shape <br> Small steps include: summer content coming in March |

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write numbers to $1,000,000$; powers of 10 ; 10/100/1000/10000/100000 more or less; partition numbers to $1,000,000$; number line to $1,000,000$; compare and order numbers to 100,000; compare and order numbers to $1,000,000$; round to the nearest 10,100 or 1000; round within 100,000; round within 1,000,000.

## Number: Addition and subtraction

Small steps include: mental strategies; add whole numbers with more than four digits; subtract whole numbers with more than four digits; round to check answers; inverse operations; multi-step addition and subtraction problems; compare calculations; find missing numbers;

## Number: Multiplication and division

Small steps include: multiples; common multiples; factors; common factors; prime numbers; square numbers; cube numbers; multiply by 10,100 and 1,000 ; divide by 10 , 100 and 1,000 ; multiples of 10,100 and 1,000.

## Number: Fractions

Small steps include: find fractions equivalent to a unit fraction; find fraction equivalent to a
model); multiply a 2-digit number by a 2 digit number; multiply a 3-digit number by a 2-digit number; multiply a 4-digit number by a 2-digit number; solve problems with multiplication; short division; divide a 4-digit number by a 1-digit number; divide with remainders; efficient division; solve problems with multiplication and division.

## Number: Fractions

Small steps include: Multiply a unit fraction by an integer; multiply a non-unit fraction by an integer; multiply a mixed number by an integer; calculate a fraction of a quantity; fraction of an amount; find the whole' use fractions as operators;

## Number: Decimals and percentages

 Small steps include: decimals up to 2 decimal places; equivalent fractions and decimals (tenths); equivalent fractions and decimals (hundredths); equivalent fractions and decimals; thousandths as fractions; thousandths as decimals; thousandths on a place value chart; order and compare decimals (same number of decimal places); order and compare any decimals with up to 3 decimal places; round to the nearest whole number; round to 1 decimal
## Geometry: Position and direction

Small steps include: summer content coming in March

## Number: Decimals

Small steps include: summer content coming in March

## Number: Negative numbers

Small steps include: summer content coming in March

## Measurement: Converting units

Small steps include: summer content coming in March

## Measurement: Volume

Small steps include: summer content coming in March

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|  | non-unit fraction; recognise equivalent fractions; convert improper fractions to mixed numbers; convert mixed numbers to improper fractions; compare fractions less than 1; order fractions less than 1; compare and order fractions greater than 1; add and subtract fraction with the same denominator; add fractions within 1 ; add fractions with a total greater than 1; add to a mixed number; add two mixed numbers; subtract fractions; subtract from a mixed number; subtract from a mixed number- breaking the whole; subtract two mixed numbers. | place; understand percentages as fractions; percentages as decimals; equivalent fractions, decimals and percentage. <br> Measurement: Perimeter and area <br> Small steps include: perimeter of rectangles; perimeter of rectilinear shapes; perimeter of polygons; area of rectangles; area of compound shapes; estimate area <br> Statistics <br> Small steps include: Draw line graphs; read and interpret line graphs; read and interpret tables; two-way tables; read and interpret timetables. |  |
| :---: | :---: | :---: | :---: |
| Year 6 | Number: Place value <br> Small steps include: Numbers to 1,000,000; Numbers to 10,000,000; Read and write numbers to 10,000,000; Powers of 10; Number line to $10,000,000$; Compare and order any integers; Round any integer; Negative numbers <br> Number: Addition, subtraction, multiplication and division | Ratio <br> Small steps include: Add or multiply?; Use ratio language; Introduction to the ratio symbol; Ratio and fractions; Scale drawing; Use scale factors; Similar shapes; Ratio problems; Proportion problems; Recipes <br> Algebra <br> Small steps include: 1-step function machines; 2-step function machines; Form expressions; Substitution; Formulae; Form | Geometry Shape <br> Small steps include: summer content coming in March <br> Geometry Position and direction <br> Small steps include: summer content coming in March <br> Themed projects, consolidation and problem solving |

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|  | Fraction of an amount Step 7 Fraction of an <br> amount - find the whole; | Small steps include: Shapes - same area; <br> Area and perimeter; Area of a triangle - <br> counting squares; Area of a right-angled <br> triangle; Area of any triangle; Area of a <br> parallelogram; Volume - counting cubes; <br> Volume of a cuboid |
| :--- | :--- | :--- |
| Measurement: Converting units <br> Small steps include: Metric measures Step 2 <br> Convert metric measures Step 3 Calculate <br> with metric measures Step 4 Miles and <br> kilometres Step 5 Imperial measures | Statistics <br> Small steps include: Line graphs; Dual bar <br> charts; Read and interpret pie charts; Pie <br> charts with percentages; Draw pie charts; <br> The mean |  |

