# Year 5 Maths Overview

St George's Beneficial C of E Primary School

| Week → | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
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| **Autumn** | Place Value | | | Negative numbers | Addition & Subtraction | | Multiplication & Division (A & B) | | | | | | | |
| **Spring** | Shape | | | Fractions (A & B) | | | | | | Decimals & Percentages | | | | |
| **Summer** | Perimeter & Area | | Volume | Decimals | | | Converting units | | Statistics | | Position & Direction | | | |

| Unit | Small Steps |
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| **Place Value** | Year 4 – Step 5: Represent numbers to 10,000<br>Year 4 – Step 6: Partition numbers to 10,000<br>~~1. Roman numerals to 1000~~<br>~~2. Numbers to 10,000~~<br>3. Numbers to 100,000<br>4. Numbers to 1,000,000<br>5. Read and write numbers to 1,000,000<br>6. Powers of 10<br>7. 10, 100, 1000, 10000, 100000 more or less<br>~~8. Partition numbers to 1,000,000~~<br>~~9. Number line to 1,000,000~~<br>10. Compare and order numbers to 100,000<br>11. Compare and order numbers to 1,000,000<br>12. Round to the nearest 10, 100 or 1000<br>13. Round within 100,000<br>~~14. Round within 1,000,000~~ |
| **Negative numbers** | 1. Understand negative numbers<br>2. Count through zero in 1s<br>3. Count through zero in multiples<br>4. Compare and order negative numbers<br>5. Find the difference |

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| **Addition & Subtraction** | 1. Mental strategies<br>2. Add whole numbers with more than four digits<br>3. Subtract whole numbers with more than four digits<br>4. Round to check answers<br>5. Inverse operations (addition and subtraction)<br>6. Multi-step addition and subtraction problems<br>7. Compare calculations<br>8. Find missing numbers |
| **Multiplication & Division (A & B)** | **(A)**<br>**1. Multiples**<br>**2. Common multiples**<br>**3. Factors**<br>**4. Common factors**<br>5. Prime numbers<br>**6. Square numbers**<br>7. Cube numbers<br>**8. Multiply by 10, 100 and 1000**<br>**9. Divide by 10, 100 and 1000**<br>**10. Multiples of 10, 100 and 1000** |

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| | **(B)**<br>**1. Multiply up to a 4-digit number by a 1-digit number**<br>**2. Multiply a 2-digit number by a 2-digit number (area model)**<br>**3. Multiply a 2-digit number by a 2-digit number**<br>**4. Multiply a 3-digit number by a 2-digit number**<br>**5. Multiply a 4-digit number by a 2-digit number**<br>**6. Solve problems with multiplication**<br>Year 3 – Step 7: Divide a 2-digit number by a 1-digit number – no exchange<br>Year 3 – Step 8: Divide a 2-digit number by a 1-digit number – flexible partitioning<br>Year 3 – Step 9: Divide a 2-digit number by a 1-digit number – with remainders<br>Year 4 – Step 11: Divide a 2-digit number by a 1-digit number (1)<br>Year 4 – Step 12: Divide a 2-digit number by a 1-digit number (2)<br>Year 4 – Step 13: Divide a 3-digit number by a 1-digit number<br>**7. Short division**<br>**8. Divide a 4-digit number by a 1-digit number**<br>**9. Divide with remainders**<br>**10. Efficient division**<br>**11. Solve problems with multiplication and division** |

| **Shape** | Year 4 – Step 1: Understand angles as turns<br>Year 4 – Step 2: Identify angles<br>Year 4 – Step 3: Compare and order angles<br>1. Understand and use degrees<br>**2. Classify angles**<br>**3. Estimate angles**<br>**4. Measure angles up to 180°**<br>**5. Draw lines and angles accurately**<br>~~6. Calculate angles around a point~~<br>~~7. Calculate angles on a straight line~~<br>8. Lengths and angles in shapes<br>9. Regular and irregular polygons<br>10. 3-D shapes |
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| **Fractions (A & B)** | **(A)**<br>Year 3 – Step 9: Equivalent fractions on a number line<br>Year 3 – Step 10: Equivalent fractions as bar models<br>Year 4 – Step 9: Equivalent fractions on a number line<br>Year 4 – Step 10: Equivalent fraction families<br>**1. Find fractions equivalent to a unit fraction**<br>**2. Find fractions equivalent to a non-unit fraction**<br>**3. Recognise equivalent fractions**<br>4. Convert improper fractions to mixed numbers<br>5. Convert mixed numbers to improper fractions<br>6. Compare fractions less than 1<br>7. Order fractions less than 1<br>8. Compare and order fractions greater than 1<br>9. Add and subtract fractions with the same denominator<br>10. Add fractions within 1<br>11. Add fractions with total greater than 1<br>12. Add to a mixed number<br>13. Add two mixed numbers<br>14. Subtract fractions<br>15. Subtract from a mixed number<br>16. Subtract from a mixed number – breaking the whole<br>17. Subtract two mixed numbers |

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| | **(B)**<br>**~~1. Multiply a unit fraction by an integer~~**<br>**~~2. Multiply a non-unit fraction by an integer~~**<br>**~~3. Multiply a mixed number by an integer~~**<br>**4. Calculate a fraction of a quantity**<br>**5. Fraction of an amount**<br>**6. Find the whole**<br>**~~7. Use fractions as operators~~** |
| **Decimals & Percentages**<br><br>**NOTE:** When covering steps 8-11, do not use numbers with more than 2 decimal places. | **1. Decimals up to 2 decimals places**<br>**2. Equivalent fractions and decimals (tenths)**<br>**3. Equivalent fractions and decimals (hundredths)**<br>**4. Equivalent fractions and decimals**<br>~~5. Thousandths as fractions~~<br>~~6. Thousandths as decimals~~<br>~~7. Thousandths on a place value chart~~<br>**8. Order and compare decimals (same number of decimal places)**<br>**9. Order and compare any decimals with up to ~~3~~ 2 decimal places**<br>**10. Round to the nearest whole number**<br>**11. Round to 1 decimal place**<br>~~12. Understand percentages~~<br>~~13. Percentages as fractions~~<br>~~14. Percentages as decimals~~<br>**~~15. Equivalent fractions, decimals and percentages~~** |

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| **Perimeter & Area** | 1. Perimeter of rectangles<br>2. Perimeter of rectilinear shapes<br>3. Perimeter of polygons<br>**4. Area of rectangles**<br>**5. Area of compound shapes**<br>6. Estimate area |
| **Volume** | 1. Cubic centimetres<br>2. Compare volume<br>3. Estimate volume<br>4. Estimate capacity |
| **Decimals** | 1. Use known facts to add and subtract decimals within 1<br>2. Complements to 1<br>3. Add and subtract decimals across 1<br>Year 4 (Money) – Step 5: Calculate with money<br>Year 4 (Money) – Step 6: Solve problems with money<br>~~4. Add decimals with the same number of decimal places~~<br>~~5. Subtract decimals with the same number of decimals places~~<br>~~6. Add decimals with different numbers of decimal places~~<br>~~7. Subtract decimals with different numbers of decimals places~~<br>~~8. Efficient strategies for adding and subtracting decimals~~<br>9. Decimals sequences<br>**10. Multiply by 10, 100 and 1000**<br>**11. Divide by 10, 100 and 1000**<br>12. ~~**Multiply and divide decimals – missing values**~~ |

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| **Converting units** | 1. Kilograms and kilometres<br>2. Millimetres and millilitres<br>**3. Convert units of length**<br>**4. Convert between metric and imperial units**<br>**5. Convert units of time**<br>6. Calculate with timetables |
| **Statistics** | 1. Draw line graphs<br>2. Read and interpret line graphs<br>3. Read and interpret tables<br>4. Two-way tables<br>5. Read and interpret timetables |
| **Position & Direction** | 1. Read and plot coordinates<br>2. Problem solving with coordinates<br>3. Translation<br>4. Translation with coordinates<br>5. Lines of symmetry<br>6. Reflection in horizontal and vertical lines |