**Year 5 Whole Year Maths Curriculum Coverage**

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| **Place Value** |
| 1. Read, write, order & compare numbers to at least 1 000 000 and determine the value of each digit. |
| 2. Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 |
| 3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. |
| 4. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. |
| **Addition and Subtraction** |
| 5. Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). |
| 6. Add and subtract numbers mentally with increasingly large numbers. Use rounding to check answers to calculations and levels of accuracy. |
| 7. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. |
| **Multiplication and Division** |
| 8. Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. |
| 9. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19. |
| 10. Multiply numbers up to 4 digits by a 1- or 2-digit number using a formal written method. Divide numbers up to 4 digits by a 1-digit number using the formal written method of short division. |
| 11. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. |
| 12. Recognise and use square numbers and cube numbers, and the notation for squared and cubed. |
| **Fractions** |
| 13. Compare and order fractions whose denominators are all multiples of the same number. Add and subtract fractions with the same denominator and multiples of the same number. |
| 14. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. |
| 15. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. |
| 16. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. |
| 17. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read and write decimal numbers as fractions (e.g. 0.72 = ⁷²∕₁₀₀). |
| 18. Read, write, order and compare numbers with up to three decimal places. Solve problems involving number up to three decimal places. |
| 19. Write percentages as a fraction. Solve problems which require knowing percentage and decimal equivalents of ⅟₂, ⅟₄, ⅟₅, ⅖, ⅘ and those with a denominator of a multiple of 10 or 25. |
| **Measure** |
| 20. Convert between different units of metric measure (e.g. km & m; cm & m; cm & mm; g & kg; l & ml). Use approx. equivalences between metric and imperial units (e.g. inches, pounds & pints). |
| 21. Measure & calculate the perimeter of composite rectilinear shapes in cm/m. Calculate the area of squares/rectangles using standard units, square cm/m and estimate the area of irregular shapes. |
| 22. Estimate volume (e.g. using 1 cm blocks to build cubes/cuboids) and capacity (e.g. using water). |
| 23. Solve probs involving converting between units of time. Use all four operations to solve probs involving measure (e.g. length, mass, volume, money) using decimal notation including scaling. |
| **Geometry** |
| 24. Identify 3D shapes, including cubes and other cuboids, from 2D representations. |
| 25. Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees. |
| 26. Identify: angles at a point and one whole turn (total 360⁰); angles at a point on a straight line and ½ a turn (total 180⁰); other multiples of 90⁰. |
| 27. Use the properties of rectangles to deduce related facts and find missing lengths and angles. |
| 28. Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. |
| **Statistics** |
| 29. Solve comparison, sum and difference problems using information presented in a line graph. |
| 30. Complete, read and interpret information in tables, including timetables. |