**SANDBROOK SMATHS LONG TERM ASSESSMENT PLAN YEAR 5/6**

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| **LEARNING CYCLE** | **BOOK 5 CHAPTER** | **RELATED AM BULLET POINT** | **EXPECTED BULLET POINT COMPLETION** | **AM ASSESSMENT MILESTONE** |
| **1** | **Numbers to 1 000 000** | 5.1. Read, write, order & compare numbers to at least 1 000 000 and determine the value of each digit. | **5.1** |  |
| 5.2. 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 |  |
| 5.6. Use rounding to check answers to calculations and levels of accuracy. |  |
| **Whole Numbers: Addition and Subtraction** | 5.2. 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 | **5.2** |
| 5.5. Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). | **5.5** |
| 5.6. Add and subtract numbers mentally with increasingly large numbers. Use rounding to check answers to calculations and levels of accuracy. | **5.6** | 5B A cumulative total of at least 4 bullet points |
| **2** | **Whole Numbers: Multiplication and Division** | 5.8. Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. | **5.8** |  |
| 5.9. 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. | **5.9** |
| 5.10. 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. | **5.10** |
| 5.11. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. | **5.11** |
| 5.12. Recognise and use square numbers and cube numbers, and the notation for squared and cubed. | **5.12** |
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| **2** | **Whole Numbers: Word Problems** | 5.7. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. | **5.7** |  |
| **Graphs** | 5.29. Solve comparison, sum and difference problems using information presented in a line graph. | **5.29** |
| 5.30. Complete, read and interpret information in tables, including timetables. | **5.30** | 5DA cumulative total of at least 12 bullet points |
| **3** | **Fractions** | 5.13. 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. | **5.13** |  |
| 5.14. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. | **5.14** |
| 5.15. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number. | **5.15** |
| 5.16. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. | **5.16** |
| 5.17. Read and write decimal numbers as fractions (e.g. 0.72 = ⁷²∕₁₀₀). |  |
| **Decimals** | 5.17. 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). | **5.17** |
| 5.18. Read, write, order and compare numbers with up to three decimal places. Solve problems involving number up to three decimal places. | **5.18** | 5SA cumulative total of at least 18 bullet points |
| **4** | **Percentages** | 5.19. 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. | **5.19** |  |
| **Geometry** | 5.24. Identify 3D shapes, including cubes and other cuboids, from 2D representations. | **5.24** |
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| **4** | **Geometry** | 5.25. Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees. | **5.25** |  |
| 5.26. 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. | **5.26** |  |
| 5.27. Use the properties of rectangles to deduce related facts and find missing lengths and angles. | **5.27** | 5SA cumulative total of at least 23 bullet points |
| **5** | **Position and Movement** | 5.28. 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. | **5.28** |  |
| **Measurements** | 5.20. 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). |  |  |
| 5.23. 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. | **5.23** | 5AA cumulative total of at least 25 bullet points |
| **6** | **Area and Perimeter** | 5.21. 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. | **5.21** |  |
| **Volume** | 5.20. Convert between different units of metric measure (e.g. l & ml). Use approx. equivalences between metric and imperial units (e.g. inches, pounds & pints). | **5.20** |
| 5.22. Estimate volume (e.g. using 1 cm blocks to build cubes/cuboids) and capacity (e.g. using water). | **5.22** |
| **Roman Numerals** | 5.4. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals. | **5.4** | 5AA cumulative total of at least 29 bullet points |
| **N/A** | 5.3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. |  |