



Maths Medium Term Overview – Autumn Year 5

Year 5 – Autumn term	
Week & Focus	NC objectives to be covered. NB – Non-statutory guidance and small step changes in repeated objectives are in bold.
1 – Number – Number and Place value	▪ Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (Use number in context, for example measurement. Extend and apply their understanding of the number system to the decimal numbers and fractions that they have met in previous years.) ▪ Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 (Relate the numbers to their position on a number line.) ▪ Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. Use number in context, for example measurement. Count from any given number in <u>whole-number</u> steps extending beyond zero when counting backwards; relate the numbers to their position on a number line.
2 – Number – Number and Place value	▪ Recognise and describe linear number sequences, and find the term-to-term rule. ▪ Read Roman numerals to 1000 (M). ▪ Solve number problems and practical problems related to the number and place value objectives taught so far.



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3 - Addition	▪ Add numbers mentally with increasingly large numbers. Refer to mental calculation strategies booklet for guidance. ▪ Add whole numbers with more than 4 digits, including using formal written methods (columnar addition) Refer to pgs 33-36 addition booklet. ▪ Solve addition problems (focus on single step) in contexts deciding which operations and methods to use and why.
4 - Subtraction	▪ Subtract numbers mentally with increasingly large numbers. Refer to mental calculation strategies booklet for guidance. ▪ Subtract whole numbers with more than 4 digits, including using formal written methods (columnar subtraction) Refer to pgs 41-44 subtraction booklet. ▪ Solve addition and subtraction problems (focus on single step) in contexts deciding which operations and methods to use and why. ▪ Use inverse operation to check addition and subtraction.
5 - Multiplication	▪ Multiply numbers mentally drawing upon known facts. Rehearse multiplication facts and use these to derive division facts, to find factors of two-digit numbers and to multiply multiples of 10 and 100. Use factors to work out a calculation such as 16×6 by thinking of it as $16 \times 2 \times 3$.



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	▪ Multiply numbers up to 4 digits by a <u>one-digit</u> number using a formal written method. Develop and refine written methods for multiplication. Secure and consolidate understanding of 2-digit and 3-digit by 1-digit short multiplication as appropriate before introducing 4-digit by 1-digit. (May need to re-visit expanded layouts (such as the grid method), moving towards a compact layout for $HTU \times U$. (Short multiplication) Refer to pg 19 and top of pg 20 multiplication booklet. ▪ Recognise and use square numbers and cube numbers and the notation for squared ⁽²⁾ and cubed ⁽³⁾ ▪ Problem solving relating to the above objectives.
6- Division	▪ Divide numbers mentally drawing upon known facts. ▪ Divide numbers up to 4 digits by a <u>one-digit</u> number using the formal written method of short division. Develop and refine written methods for division. Secure and consolidate understanding of 2-digit and 3-digit by 1-digit short division as appropriate before introducing 4-digit by 1-digit. Refer to pg 21 division booklet. ▪ Problem solving related to these objectives.
7 - Fractions	▪ Continue to develop understanding of fractions as numbers, measures and operators by finding fractions of numbers and quantities. ▪ Counting forwards and backwards in simple fractions.



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	▪ Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths ▪ Compare and order fractions whose denominators are all multiples of the same number ▪ Add and subtract fractions with the same denominator and denominators that are multiples of the same number ▪ Recognise mixed numbers and improper fractions and convert from one form to the other. Write mathematical statements >1 as a mixed number
8 – Measurement – Length	▪ Convert between different units of metric measure (for example, km and m; cm and m; cm and mm) ▪ Understand and use approximate equivalences between metric units and common imperial units such as inches. ▪ Problem solving related to these.
9 – Measurement – Perimeter & Area	▪ Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m (Revision of Y4 objective) ▪ Measure and calculate the perimeter of composite rectilinear shapes in cm and m.



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	▪ Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) ▪ Compare areas and perimeters. Children need to know that the relationship between area and perimeter is not a simple one. Increasing or decreasing area does not necessarily mean the perimeter increases or decreases respectively, or vice versa.
10 – Geometry – Properties of shapes	▪ Identify 3-D shapes, including cubes and other cuboids, from 2D representations. ▪ Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. ▪ Use the properties of rectangles to deduce related facts and find missing lengths and angles.
11 – Measurement - time	▪ Convert between units of time (Revision from Y4) ▪ Read, write and convert time between analogue and digital 12- and 24-hour clocks (Revision from Y4) ▪ Solve problems involving converting between units of time.
12 - Statistics	▪ Complete, read and interpret information in tables including timetables (linked to previous week)
ADDITIONAL WEEKS FOR ASSESSMENT, REVISITING, CONSOLIDATION & THEMED WORK	