



Maths Medium Term Overview – Spring Year 5 & 6

Year 5&6 – Spring term		
Week & Focus	NC objectives to be covered. NB – Non-statutory guidance and small step changes in repeated objectives are in bold.	
	YEAR 5 OBJECTIVES	YEAR 6 OBJECTIVES
1 – Number & Place Value	- Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit (Extend and apply their understanding of the number system to the fractions that they have met so far in Year 5.) - Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 (Progress to include tenths and hundredths.) - Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.	- Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.- consolidation. - Round any whole number to a required degree of accuracy (including placing numbers on a number line) - Solve number and practical problems that involve all the above – consolidation.
2 – Number & Place Value & Decimals	- Round decimals with two decimal places to the nearest whole number and to one decimal place. - Read Roman numerals to 1000 (M). - Recognise and describe linear number sequences, including those involving fractions, and find the term-to-term rule in words. - Solve number problems and practical problems that involve all of the above objectives.	Consolidation from Y5: Round decimals with two decimal places to the nearest whole number and to one decimal place. Consolidation from Y5: Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals. - Generate and describe linear number sequences.



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3 – Addition & Subtraction + some multiplication & division (some of week 4 may start at the end of this week as much of addition & subtraction is consolidation)	▪ Add and subtract numbers mentally with increasingly large numbers. (Consolidation through problem solving) Refer to mental calculation strategies booklet for guidance. ▪ Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) (Consolidation through problem solving) Refer to pgs 33-36 addition booklet. Refer to pgs 41-44 subtraction booklet. ▪ Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. ▪ Solve addition and subtraction multi step problems in contexts deciding which operations and methods to use and why. ▪ Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.	▪ Perform mental calculations, including with mixed operations and large numbers – consolidation. ▪ Use their knowledge of the order of operations to carry out calculations involving the four operations. Pupils explore the order of operations using brackets; for example, $2 + 1 \times 3 = 5$ and $(2 + 1) \times 3 = 9$ ▪ Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. ▪ Identify common factors, common multiples and prime numbers. ▪ Solve problems involving addition, subtraction, multiplication and division. Refer to pgs 41-43 addition booklet and pgs 49-51 of subtraction.
4 & 5 – Multiplication & Division	▪ Multiply and divide numbers mentally drawing upon known facts. Consolidation from Autumn but to include new focus: To find factors of two-digit	▪ Multiply one-digit numbers with up to 2 decimal places by whole numbers. Refer to pgs 27 -28 multiplication booklet.



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numbers and use factors to work out a calculation such as 16×6 by thinking of it as $16 \times 2 \times 3$.

- Multiply numbers up to 4 digits by a two-digit number using a formal written method, **Refer to pg 21-22 multiplication booklet**. Extend expanded long multiplication method to 3 and 4 digit numbers from 2 digit in Autumn.
- Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. **Refer to pgs 22-23 division booklet**.
- Multiply & divide whole numbers and those involving decimals by 10, 100 and 1000.
- Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.

- Use written division methods in cases where the answer has up to two decimal places. **Refer to pgs 25-30 division booklet**.
- Introduce the division of decimal numbers by one-digit and 2-digit whole numbers. **Refer to pgs 26, 27 & 30 division booklet**. Recognise division calculations as the inverse of multiplication.
- Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. **Refer to pgs 28-30 division booklet**.
- Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100, 1000 giving answers up to three decimal places.
- Solve problems involving addition, subtraction, multiplication and division. **Refer to pgs 41-43 addition booklet and pgs 49-51 of subtraction**.



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		- Solve problems which require answers to be rounded to specified degrees of accuracy +check the reasonableness of their answers. - Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
6 – Fractions, Decimals & Percentages	- Read, write, order and compare numbers with up to 3 decimal places. – consolidation. - Solve problems involving number up to 3 decimal places – To include addition and subtraction of numbers including decimals, with the same number of decimal places. – Refer to pgs 36-37 addition booklet and pgs 44-45 subtraction booklet. - Recognise the per cent symbol (%) and understand that per cent relates to ‘number of parts per hundred’, and write percentages as a fraction with denominator 100.	- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. - Divide proper fractions by whole numbers (for example $\frac{1}{3} \div 2 = \frac{1}{6}$) - Associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375) for a simple fraction (for example, $\frac{3}{8}$) - Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison. - Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.



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7 – Mass / Measures	- Convert between different units of metric measure (for example, kg and g) - Understand and use approximate equivalences between metric units and common imperial units such as pounds. - Problem solving related to these.	- Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places. - Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
8 – Time (Y5) Ratio & proportion (Y6)	- 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.	- Recognise proportionality in contexts when the relations between quantities are in the same ratio (for example, similar shapes and recipes). - Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. - Solve problems involving similar shapes where the scale factor is known or can be found. - Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.



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9 – Geometry – Properties of shape	- Identify angles at a point and one whole turn (total 360°), angles at a point on a straight line and a half turn (total 180°) and other multiples of 90° - Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. - Use the properties of rectangles to deduce related facts and find missing lengths and angles. - Problem solving related to the above.	- Recognise angles where they meet at a point, are on a straight line and find missing angles and vertically opposite angles. - Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons. These relationships might be expressed algebraically for example, $a = 180 - (b + c)$.
10 – Geometry – Position & Direction	- Revision of coordinates from Y4. - Identify, describe and represent the position of a shape following a translation, using the appropriate language, and know that the shape has not changed. - 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.	- Describe positions on the full coordinate grid (all four quadrants). - Draw and translate simple shapes on the coordinate plane and reflect them in the axes. Predict missing coordinates using the properties of shapes. These might be expressed algebraically for example, translating vertex (a, g) to $(a - 2, b - 3)$.



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11 – Statistics + revision of time

- Read, write and convert time between analogue and digital 12- and 24-hour clocks – **consolidation (Y4 revision but needs regular practice)**.
- Solve problems involving converting between units of time. **Consolidation**
- Complete, read and interpret information in tables including timetables.
- Interpret and construct pie charts and use these to solve problems.
- Pupils link percentages of 360° to calculating angles of pie charts.
- **Consolidation from Y5:** Complete, read and interpret information in tables, including timetables.

ADDITIONAL WEEKS FOR ASSESSMENT, REVISITING, CONSOLIDATION & THEMED WORK