Maths Medium Term Planning
Woodlands Primary School

Year Group: Beech Year 5
Terms: 1 and 2

Weeks **TERM 1**	Core content coverage (Taken from Woodlands LT maps)	Learning objectives (Taken from NC)	Big Maths Coverage
1-2 **Core Number And Problem Solving** Calculation methods	• Formal methods of calc. • Word problems - 2 step - Based on calc, taught **Big Maths** • Read, write, order and compare numbers to 1,000,000	• add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction) • solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	WEEK 1 • read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit • Formal methods of calculation (every week) (addition) WEEK 2 • **multiply** and divide whole numbers and those involving decimals by 10, 100 and 1000 • Order numbers with up to three decimal places. • Formal methods of calculation (every week) (subtraction)
3-4 **Stats and Number** Fractions	• Compare and order fractions • + & - fractions **Big Maths** • Counting in thths & recognising thths and relate to ths, hths and decimals • X ÷ 10, 100, etc • Read, write, order and compare numbers to 1,000,000 • Formal methods of calc. • FDP equivalents	• compare and order fractions whose denominators are all multiples of the same number • recognise mixed numbers and improper fractions and convert from one form to the other • add and subtract fractions with the same denominator and related fractions; write mathematical statements >1 as a mixed number (e.g. 2/5 + 4/5 = 6/5 = 11/5)	WEEK 3 • read, write, order and compare numbers with up to three decimal places • multiply and **divide** whole numbers and those involving decimals by 10, 100 and 1000 • Formal methods of calculation (every week) (addition and subtraction) WEEK 4 • 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 hundred, and as a decimal fraction • Formal methods of calculation (every week) (multiplication - grid)

5 **Geometry and Number** **And** **Measure and Number** Rounding	• Rounding whole numbers up to 1,000,000 • Roman numerals **Big Maths** • Identify factors, multiples, **prime numbers**, prime factors and composite numbers. • FDP equivalents • Formal methods of calc.	• read Roman numerals to 1000 (M) and recognise years written in Roman numerals. • round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 • round decimals with two decimal places to the nearest whole number and to one decimal place	• recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) • know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
6 **Geometry and Number** Shapes	• Identify 3d shapes from 2d representations • Distinguish regular and irregular **Big Maths** • Place value • Count forwards or backwards in steps of powers of 10 from any given number	• identify 3-D shapes, including cubes and cuboids, from 2-D representations • distinguish between regular and irregular polygons based on reasoning about equal sides and angles.	• count forwards or backwards in steps of powers of 10 for any given number up to 1000000 • count forwards and backwards with positive and negative whole numbers through zero
7 **Core Number** **And** **Problem Solving** Division Multiples and Factors	• Identify factors, multiples, prime numbers, prime factors and composite numbers. • Formal methods of calc. • Mental methods of calculation **Big Maths** • Count forwards or backwards in steps of powers of 10 from any given number • Formal methods of calc.	• identify multiples and factors, including finding all factor pairs • establish whether a number up to 100 is prime and recall prime numbers up to 19 • divide numbers up to 4 digits by a one-digit number using the efficient written method of short division and interpret remainders appropriately for the context	• multiply and divide numbers mentally drawing upon known facts

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Weeks **TERM 2**	Core content coverage (Taken from Woodlands LT maps)	Learning objectives (Taken from NC)	Big Maths Coverage
1 **Measure and Number**	• Perimeter of composite rectilinear shapes • Calculate area of rectilinear shapes • Estimate area of irregular shapes **Big Maths** • Count forwards or backwards in steps of powers of 10 from any given number • Formal methods of calc. • Mental methods of calculation	• calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes • measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	• count forwards or backwards in steps of powers of 10 for any given number up to 1000000
2 and 3 **Stats and Number**	• Time reading & converting • Time problems • Timetables • Line graphs **Big Maths** • Formal methods of calc. • Mental methods of calculation • Rounding decimals • Identify factors, multiples, prime numbers, prime factors and composite numbers.	• complete, read and interpret information in tables, including timetables. • solve problems involving converting between units of time • solve comparison, sum and difference problems using information presented in line graphs	• identify multiples and factors, including finding all factor pairs • round decimals with two decimal places to the nearest whole number and to one decimal place

4 **Geometry and Number**	• Ratio and scaling (including fractions and simple rates) • + & - fractions • X fractions **Big Maths** • Formal methods of calc. • X ÷ 10, 100, etc • Count forwards or backwards	• add and subtract fractions with the same denominator and related fractions; write mathematical statements >1 as a mixed number (e.g. 2/5 + 4/5 = 6/5 = 11/5) • multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. *(Pupils should connect multiplication by a fraction to using fractions as operators, and to division, building on work from previous years. This relates to scaling by simple fractions.)*	• multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 • count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
5 **Measure and Number**	• Conversion – metric to metric • Conversion – metric to imperial **Big Maths** • Formal methods of calc. • Recognise mixed numbers and improper fractions • order and compare numbers to 1,000,000	• solve problems involving addition and subtraction of units of measure (e.g. length, mass, volume, money) using decimal notation. • convert between different units of measure (e.g. kilometre and metre; metre and centimetre; centimetre and millimetre; kilogram and gram; litre and millilitre) • understand and use basic equivalences between metric and common imperial units and express them in approximate terms	• recognise mixed numbers and improper fractions and convert from one form to the other • read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
6 and 7 **Geometry and Number**	• Angles – identify, estimate, measure and draw • Angle facts • Translation, reflection **Big Maths** • Negative numbers • Recognise and use	• know angles are measured in degrees; estimate and • measure them and draw a given angle, writing its size in degrees (^{o}) identify: ○ multiples of 90^o ○ angles at a point on a straight line and 1/2 a turn (total 180^o) ○ angles at a point and one whole turn	• interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero • recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)

	square numbers and cubed numbers. • Formal methods of calc.	(total 360^{o}) ○ reflex angles, and ○ compare different angles • 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.	