Year 5 - Yearly overview

	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12
AUTUMN	NUMBER – PLACE VALUE			NUMBER – ADDITION & SUBTRACTION		NUMBER – MULTIPLICATION & DIVISION		NUMBER – MULTIPLICATION AND DIVISION				CONSOLIDATION
SPRING	NUMBER - FRACTIONS				STATISTICS		NUMBER – DECIMALS & PERCENTAGES			PERIMETER & AREA		CONSOLIDATION
SUMMER	NUMBER – DECIMALS					GEOMETRY- PROPERTIES OF SHAPES		GEOMETRY- POSITION AND DIRECTION	MEASUREMENT- CONVERTING UNITS		MEASURES VOLUME	CONSOLIDATION

AUTUMN TERM 1

PLACE VALUE WEEKS 1-3

Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.
Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.
Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.
Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000
Solve number problems and practical problems that involve all of the above.
Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

NUMBER – ADDITION & SUBTRACTION WEEKS 4-5

Add and subtract numbers mentally with increasingly large numbers.
Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
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.

AUTUMN TERM 2

NUMBER – MULTIPLICATION & DIVISION WEEKS 6-11

Multiply and divide whole numbers by 10, 100 and 1000. Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
Recognise and use square numbers and cube numbers and the notation for squared (2) and cubed (3) Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.
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
Multiply and divide numbers mentally drawing upon known facts.
Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for 2 digit numbers.

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.
Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.

CONSOLIDATION WEEKS

SPRING 1

NUMBER – FRACTIONS WEEKS 1-4

Compare and order fractions whose denominators are multiples of the same number.
Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.
Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number [for example $\frac{2}{5}+\frac{4}{5}=\frac{6}{5}=1\frac{1}{5}$]
Add and subtract fractions with the same denominator and denominators that are multiples of the same number.
Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
Read and write decimal numbers as fractions [for example 0.71 = 71/100]
Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

STATISTICS WEEKS 5-6
Solve comparison, sum and difference problems using information presented in a line graph.
Complete, read and interpret information in tables including timetables.

SPRING 2
NUMBER – DECIMALS & PERCENTAGES WEEKS 7-9
Read, write, order and compare numbers with up to three decimal places.

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
Round decimals with two decimal places to the nearest whole number and to one decimal place.
Solve problems involving number up to three decimal places.
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, and as a decimal.
Solve problems which require knowing percentage and decimal equivalents of 12, 14, 15, 25, 45 and those fractions with a denominator of a multiple of 10 or 25.

PERIMETER & AREA WEEKS 10-11
Measure and calculate the perimeter of composite rectilinear shapes in cm and m.
Calculate and compare the area of rectangles (including squares), and including using standard units, cm2, m2 estimate the area of irregular shapes.
CONSOLIDATION WEEK

SUMMER 1

NUMBER – DECIMALS WEEKS 1-4
Solve problems involving number up to three decimal places.
Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

GEOMETRY- PROPERTIES OF SHAPES WEEKS 5-7
Identify 3D shapes, including cubes and other cuboids, from 2D representations.
Use the properties of rectangles to deduce related facts and find missing lengths and angles.
Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.

Draw given angles, and measure them in degrees (°) Identify: angles at a point and one whole turn (total 360°), angles at a point on a straight line and ½ a turn (total 180°) other multiples of 90°

SUMMER 2

GEOMETRY – PROPERTIES OF SHAPE AND DIRECTION WEEK 8

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.

MEASUREMENT- CONVERTING UNITS WEEKS 9-10

Convert between different units of metric measure [for example, km and m; cm and m; cm and mm; g and kg; l and ml]
Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
Solve problems involving converting between units of time.

MEASURES VOLUME WEEK 11

Estimate volume [for example using 1cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]
Use all four operations to solve problems involving measure.

CONSOLIDATION WEEK

Objectives to build in during extra weeks or during starter sessions:

- Count forwards and backwards in decimal steps.
- Identify the value of each digit to three decimal places.
- Identify represent and estimate numbers using the number line.
- Find 0.01, 0.1, 1, 10, 100, 100 and other powers of 10 more or less than a given number.
- Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.
- Describe and extend number sequences including those with multiplication/division steps and where the step size is a decimal.
- Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method).

- Select a mental strategy appropriate for the numbers involved in the calculation.
- Recall and use addition and subtraction facts for 1 and 10 (with decimal numbers to one decimal place).
- Derive and use addition and subtraction facts for 1 (with decimal numbers to two decimal places).
- Solve addition and subtraction problems involving missing numbers.
- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
- 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.
- Recognise and use square (2) and cube (3) numbers, and notation.
- Use partitioning to double or halve any number, including decimals to two decimal places.
- Use estimation/inverse to check answers to calculations; determine, in the context of a problem, an appropriate degree of accuracy.
- Use, read and write standard units of length and mass.
- Understand the difference between liquid volume and solid volume.
- Continue to order temperatures including those below 0°C.
- Continue to read, write and convert time between analogue and digital 12 and 24-hour clocks.
- Solve problems involving converting between units of time.
- Describe positions on the first quadrant of a coordinate grid.
- Plot specified points and complete shapes.
- Complete and interpret information in a variety of sorting diagrams (including those used to sort properties of numbers and shapes).
- Calculate and interpret the mode, median and range.