

Year 4 – Small step objective coverage

AUTUMN TERM – YEAR 4

Place value – numbers to 10 000

To recognise the value of each digit in a four-digit number using number line, place value counters, base 10 equipment and place value cards.

To round any number to the nearest 10, using number line, place value counters and base 10 equipment.

To round to the nearest 100 using number lines.

To round to the nearest 1000.

To represent 4-digit numbers using base 10 equipment and part-whole models.

To identify values and estimate numbers on a number line up to 10, 000.

To find 1, 10, 100 and 1000 more/less than a given number using base 10 equipment and place value counters.

To compare 4-digit numbers using concrete equipment and pictorial representations.

To order 4-digit numbers, focusing on the value of the digits and using a place value grid to support understanding.

To use knowledge of place value and rounding to the nearest 10 and 100 to develop an understanding of how to round to the nearest 1,000.

To learn about counting forwards and backwards in 25s.

To count back through 0 on number lines using negative numbers.

Number – Addition & Subtraction

To add with renaming (in the ones column)

To add with renaming (in tens and ones).

To add with renaming (in hundreds, tens and ones)

To calculate complements to 100.

To add using mental strategies (making tens, hundreds and thousands).

To add numbers with up to 4 digits using formal written method (no exchange).

To estimate and use inverse calculation to check answers to a calculation.

To subtract with renaming (in tens and ones).

To subtract with renaming (in hundreds, tens and ones).

To subtract using mental strategies.

To solve addition and subtraction word problems.

To solve multi-step word problems in context.

Number – Multiplication & Division

To multiply by 6 using number lines arrays.

To multiply by 7 using number lines and arrays.

To multiply by 9 by making links to the 3, 6 and 5 times-tables.

To divide by 6 using number lines and arrays.

To divide by 7 using number lines and arrays.

To divide by 9 by making links to the 3, 6 and 5 times-tables.

To multiply and divide by 11 and 12 using number lines, arrays and multiplication wheels.

To multiply by 10 & 100 using a number line and base ten.

To learn how to divide multiples of 10 and 100 using known facts and place value knowledge.

To recognise and use factor pairs.

To use written strategies including partitioning into tens and ones.

To use an expanded method to multiply a 2-digit number by a 1-digit number, in preparation for using a formal written layout (column method).

To multiply two number by a 1-digit number using a formal written short multiplication.

To multiply three digit number by a one digit number that require exchange of 1, then of more than 1.

To multiply more than two numbers using the commutative properties of multiplication to calculate.

To solve a mixture of multiplication problems by using the formal written method.

To solve multi-step multiplication and division problems using bar models to expose the underlying structure.

To divide 2-digit numbers by 1-digit numbers using the part whole model.

To recognise remainders in division using the part whole model.

To solve word problems involving division.

SPRING TERM – YEAR 4

Measurement – length & Perimeter

To find equivalence by converting m- cm & mm – cm using number lines and bar models.

To be introduced to the concept of perimeter by counting square lengths around rectangles and squares.

To find the width of a rectangle given the perimeter and the length.

To extend understanding of perimeter to include rectilinear shapes that are not rectangles or squares.

Area

To be introduced to the concept of the area of a 2D shape.

To measure area by counting squares.

To find areas of more complex rectilinear shapes by counting squares.

To make shapes with given areas.

To compare shapes according to their areas.

Fractions & Decimals

To find hundredths as fractions and recognise that 1 tenth is the same as 10 hundredths using number lines.

To find equivalent fractions using fraction walls and fraction strips.

To simplify fractions using hundredths and tenths grids.

To understand improper fractions can be great than 1 using the part whole model.

To add fractions with the same denominator where their answer is greater than one using fraction strips and fractions walls.

To subtract proper fractions from mixed numbers with the same denominator using fractions trips and fraction walls.

To apply knowledge of understanding of adding and subtracting fractions to solve problems.

To calculate the fraction of a quantity.

To use a decimal point to represent a tenth using ten frame, number line and place value grids.

To divide a 1 digit number by 10 using a place value grid and a bar model.

To understand that a hundredth as a decimal is 0.01 and will use a hundredths grid to make the connection between hundredths and tenths.

To compare decimals.

To write hundredths as a decimal and counting forwards and backwards in hundredths from a given number.

To divide 1- and 2-digit numbers by 100 using hundredths and tenths grids.

To compare decimals.

To order numbers with up to two decimal places.

To round a decimal to the nearest whole number by looking at the tenths digit.

To represent fractions and decimals using a number line and a hundredths grid.

To convert between different units of measurement and solve simple problems.

SUMMER TERM – YEAR 4

<u>Measurement – money</u>	<u>Measurement – Time</u>	<u>Geometry –Angles & 2D shape</u>	<u>Geometry – Position & direction</u>	<u>Statistics – charts and tables</u>
To record amounts of money in pounds and pence using part whole models. To recognise pounds, tenths and hundreds using a hundredths grids and a tens strip. To order amounts of money. To round money using number lines. To round amounts of money to the nearest 10p and £1 using number lines. To solve problems involving pounds and pence using number lines and bar models. To solve money problems with multiplication and division using the part-whole model. To use different strategies to solve two-step word problems.	To understanding of the equivalences between different units of time. To revise understanding of the equivalences between days, weeks, months and years. To convert between analogue and digital times. To tell the time on a 24-hour clock. To convert between 12-hour and 24-hour times expressed on analogue and digital clocks. To use knowledge of units of time to problem-solving in context.	To compare angles and identify acute, obtuse and right angles. To identify acute and obtuse angles. To recognise the similarities and differences between regular and irregular polygons. To identify the three different types of triangles. To name, describe and identify quadrilaterals, recognising their similarities and differences. To deduce fact about shapes to help solve problems and puzzles. To identify lines of symmetry within regular and irregular polygons. To identify symmetry within and outside shapes. To complete symmetric patterns when the lines of symmetry are given.	To describe relative positions on a map, initially without a grid and then with a grid. To use coordinates in the first quadrant to describe positions on a grid, using the conventional order and notation. To use coordinates to plot points in the first quadrant and to construct simple shapes by plotting their vertices. To use the properties of shapes and points to help make constructions on the coordinate grid. To carry out simple translations on a coordinate grid. To work out the translations that are needed to move from one position on the coordinate grid to another	To interpret data with larger numbers and a wider range of scales on charts, tables and pictograms. To make statements and comparisons based on data presented in line graphs. To apply data interpretation and analysis skills to a range of increasingly challenging problems

