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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Duration of term | 7 weeks 3 days | 7 weeks | 7 weeks | 6 weeks | 3 weeks 4 days | 8 weeks |
| Unit(s) taught | Place value (4 weeks 3 days)Addition and subtraction (3 weeks) | Place value / calculation methods for addition and subtraction (2 weeks) with a context of money and measuresMultiplication and division (5 weeks)Test week (2 days) | Place value and calculations (1 week)Fractions (4 weeks)Multiplication and division mid-year recap / review (1 week) | Place value and calculations Test week 6.3.19Measurement inc. perimeterStatistics with focus on reading scales | All about number (PV, calculations and fractions) focused on reasoning (2 weeks)Geometry – property of shape / positon and direction (2 weeks) | Revision prior to Nfer testsFollowing end of year assessments, use QLA to inform planning |
| Whole year focus | Y3 will have the ‘time squad’ where one child from each table will be responsible for wearing a watch. The class will learn telling the time throughout the yearTells and write the time from an analogue clock and 12-hour and 24-hour clocks. |
| Essential prior knowledge | * Ability to draw place value chart
* Understanding of two digit place value
* Secure understanding of two-digit whilst also moving to three-digit
* Count in 1s, 2s, 5s and 10s
* One more or less than a number
* Understand the value of
* Know that addition means more and subtraction means less / lower
* Number bonds to 10, 20 and 100.
 | * Place value – able to partition HTO and TO numbers
* Multiplication tables for 2, 5 and 10
* Addition and subtraction methods including HTO
* Halves and doubles including 10, 30, 50, 70, 90
 | * Halving, quartering using mental methods
* Know that 2/4 is equivalent to ½
* Vocabulary of fractions including numerator and denominators
* Multiplication tables for 3, 4 and 8
* All calculation methods for Y3
 | * Measure cm with a ruler
* Vocabulary around larger, smaller, compare, order
 | * Names of shapes identified in the Y2 curriculum
* Edges, vertices, faces, sides, lines of symmetry (in a vertical line)
* Vocabulary around right, left, up and down. Some knowledge of clockwise and anti-clockwise from use of watches throughout year
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| Key facts non negotiables | Number bonds to 100 (revision)Adding and subtracting 10s and 100s Able to count in 1s, 2s, 3s, 4s, 5s, 8s, 50s, 100sPlace value understanding to three-digit numbers | Number bonds to 10, 20 and 100Money valuesMultiplication facts for 2x, 3x, 4x, 5x, 8x and 10x tables | Can count up in fractions and decimals including tenths, quarters and halvesAble to place decimal, fraction values on a number lineIdentify fraction of shaded / unshaded squares in a shape | Recalls the formula for perimeterAble to calculate area through counting squaresConversion of mm to cm, cm to m, m to kmConversion of litres to mlConversion of g to kg | Can name all 2D shapes up to decagonCan name all 3D shapes Use of vocabulary to describe properties of 2D and 3D shapes |  |
| KPIs | * Counts from zero in multiples of four, eight, fifty and one hundred.
* Recognises the place value of each digit in a three-digit number (hundreds, tens and ones).
* Solves number problems and practical problems involving these ideas.

Adds and subtracts numbers mentally including:• A three-digit number and ones• A three-digit number and tens• A three-digit number and hundreds | * Adds and subtracts amounts of money to give change, using both £ and p in practical contexts.
* Recalls and uses multiplication and division facts for the multiplication tables:

• Three• Four• EightWrites and calculates mathematical statementsfor multiplication and division using themultiplication tables that are known including for two-digit number times one-digit numbers, using mental and progressing to formal written methods. | * Counts up and down in tenths; recognises that tenths arise from dividing an object into ten equal parts and in dividing one-digit numbers or quantities by ten.
* Recognises, finds and writes fractions of discrete set of objects; unit fractions and non-unit fractions with small denominators.
* Recognises and shows, using diagrams, equivalent fractions with small denominators.
 | * Measures, compares, adds and subtracts lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
* Identifies right angles, recognises that two right angles make a half-turn, three make three quarters of a turn and four a complete turn;
* Identifies whether angles are greater than or less than a right angle.
* Interprets and presents data using bar charts, pictograms and tables.
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| Additional objectives | * compare and order numbers up to 1000
* identify, represent and estimate numbers using different representations
* read and write numbers up to 1000 in numerals and in words
* add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
* estimate the answer to a calculation and use inverse operations to check answers
* solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
 | * solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects
 | * recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators
* add and subtract fractions with the same denominator within one whole [for example, 75 + 71 = 76]
* compare and order unit fractions, and fractions with the same denominators
* solve problems that involve all of the above.
 | * measure the perimeter of simple 2-D shapes
* add and subtract amounts of money to give change, using both £ and p in practical contexts
* tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
* estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o’clock, a.m./p.m., morning, afternoon, noon and midnight
* know the number of seconds in a minute and the number of days in each month, year and leap year
* compare durations of events [for example to calculate the time taken by particular events or tasks].
* solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables.
 | * draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
* recognise angles as a property of shape or a description of a turn
* identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
* identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
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| Explicit teaching of problem solving | Trial and errorAlgebra | Trial by improvement  | Lists and tables | Act it out | Working backwardsPattern | Simplify  |
| Vocabulary | More than, less than, greater than (and symbols related to this)EqualsHundreds, tens and onesPlace valueOrderCompareOne hundred more / lessApproximate(ly)Round, nearest, round to the nearest ten, hundred, round up, round downAdd, subtract, total, difference between, altogether, hundreds boundary | Multiple, multiplied by, factor, productRemainderGrouping, sharing, division, divisible by, double, near double, half, halvemoneycoinpenny, pence, poundprice, costbuy, bought, sell, soldspend, spentpaychangedear, costs morecheap, costs less, cheapercosts the same ashow much …?how many …?total | fractionequivalent fractionmixed numbernumerator, denominatorequal partequal groupingequal sharingparts of a wholehalf, two halvesone of two equal partsquarter, two quarters, three quartersone of four, equal partsone third, two thirdsone of three equal partssixths, sevenths, eighths, tenths … | measuremeasurementsizecomparemeasuring scale, divisionguess, estimateenough, not enoughtoo much, too littletoo many, too fewnearly, close to, about the same as, approximatelyroughlyjust over, just undermillimetre, centrimetre, metre, kilometre, mile, distance apart/between / to / fromkilograms, weigh, weight,  | shape, patternflatcurved, straightroundhollow, solidsortmake, build, drawperimetersurfacesizebigger, larger, smallersymmetry, symmetrical, symmetrical patternline symmetrypattern, repeating patternmatchcorner, sidepoint, pointedrectangle (including square), rectangularcircle, circulartriangle, triangularpentagon, pentagonalhexagon, hexagonaloctagon, octagonalquadrilateralright-angledparallel, perpendicularface, edge, vertex, verticescube, cuboidpyramidsphere, hemisphereconecylinderprism, triangular prism |  |