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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 measures  Multiplication 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 6.3.19  Measurement inc. perimeter  Statistics 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 tests  Following 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 year  Tells 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 |  |
| 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, 100s  Place value understanding to three-digit numbers | Number bonds to 10, 20 and 100  Money values  Multiplication facts for 2x, 3x, 4x, 5x, 8x and 10x tables | Can count up in fractions and decimals including tenths, quarters and halves  Able to place decimal, fraction values on a number line  Identify fraction of shaded / unshaded squares in a shape | Recalls the formula for perimeter  Able to calculate area through counting squares  Conversion of mm to cm, cm to m, m to km  Conversion of litres to ml  Conversion of g to kg | Can name all 2D shapes up to decagon  Can 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  • Eight  Writes and calculates mathematical statements  for multiplication and division using the  multiplication 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. |  |  |
| 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. |  |
| Explicit teaching of problem solving | Trial and error  Algebra | Trial by improvement | Lists and tables | Act it out | Working backwards  Pattern | Simplify |
| Vocabulary | More than, less than, greater than (and symbols related to this)  Equals  Hundreds, tens and ones  Place value  Order  Compare  One hundred more / less  Approximate(ly)  Round, nearest, round to the nearest ten, hundred, round up, round down  Add, subtract, total, difference between, altogether, hundreds boundary | Multiple, multiplied by, factor, product  Remainder  Grouping, sharing, division, divisible by, double, near double, half, halve  money  coin  penny, pence, pound  price, cost  buy, bought, sell, sold  spend, spent  pay  change  dear, costs more  cheap, costs less, cheaper  costs the same as  how much …?  how many …?  total | fraction  equivalent fraction  mixed number  numerator, denominator  equal part  equal grouping  equal sharing  parts of a whole  half, two halves  one of two equal parts  quarter, two quarters, three quarters  one of four, equal parts  one third, two thirds  one of three equal parts  sixths, sevenths, eighths, tenths … | measure  measurement  size  compare  measuring scale, division  guess, estimate  enough, not enough  too much, too little  too many, too few  nearly, close to, about the same as, approximately  roughly  just over, just under  millimetre, centrimetre, metre, kilometre, mile, distance apart/between / to / from  kilograms, weigh, weight, | shape, pattern  flat  curved, straight  round  hollow, solid  sort  make, build, draw  perimeter  surface  size  bigger, larger, smaller  symmetry, symmetrical, symmetrical pattern  line symmetry  pattern, repeating pattern  match  corner, side  point, pointed  rectangle (including square), rectangular  circle, circular  triangle, triangular  pentagon, pentagonal  hexagon, hexagonal  octagon, octagonal  quadrilateral  right-angled  parallel, perpendicular  face, edge, vertex, vertices  cube, cuboid  pyramid  sphere, hemisphere  cone  cylinder  prism, triangular prism |  |