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| Maths | Autumn | Spring | Summer |
| **Year 1** | **Place Value**  Count to 20 and estimate quantities Partition teen numbers; compare Count to 100 in 1s/10s; compare  Say 1/10 more or less up to 100 **Addition and Subtraction**  Adding by counting on Partitioning to create number bonds  Subtraction: count back/take away Add by counting on (numbers to 20 Number bonds to 10  Say one more/one less up to 100  **Shape and Data**  Explore shapes; do line symmetry Understand/identify  3-D shapes  Sort 2-D shapes according to properties  Understand/identify 3-D shapes  **Money and Time**  Coins to 10p: identify and exchange Make amount/find possibilities O'clock times and sequence events Days of the week, months of the year | **Place Value**  1 more and 1 less than 2-digit number  Count in 10s; say numbers 10 more/less  Place value in 2-digit numbers  Compare, order 2-digit numbers using PV  Place value to order 2-digit nos; say 10 more/less **Money and Fractions**  Use coins to pay amounts and find totals  Find change; differences between amounts Understand halves and quarters  Find half and quarter of amounts  **Addition and Subtraction**  Number bonds to 8 and 9; doubles  Use facts and doubles to add 3 numbers  Find 10 more/less than 2-digit number  Relate adding/subtracting using  Add and subtract 10, 20, 30  **Measures and Data**  Measure using a uniform unit  Compare and measure weights  Measure lengths in cubes  Find differences between lengths  **Multiplication**  Even and odd numbers and doubles  Counting in 2s; even/odd numbers  Doubling and halving | **Addition and Subtraction**  Add 10s and near 10s to a  Patterns to add 1-digit to 2-digit numbers Patterns to add/subt 1-digit numbers  **Money and Time**  Find totals of coins using number facts Change/differences in amounts of money  Totals of amounts; change from 10p, 20p Analogue time to half/hour; sequencing  Analogue and digital time to half/hour  Units of time and ways of showing times  **Addition and Subtraction**  Number bonds to 10; add to next 10  Add by bridging 10 using number bonds  Bridge 10 to subtract with number bonds Number facts to add and subtract money  **Multiplication, Division, Fractions**  Counting in 2s, 5s and 10s  Division by finding how many sets  Doubling and halving  Multiplication and division as sets  **Measures, Shape, Data**  Compare and measure capacities  Explore container capacities  Recognise/describe 3-D shapes and turns Measure time using different units  Time data: graphs and pictograms |
| **Year 2** | **Place Value and Money**  Count to 100, identify number, estimate  Place value in 2-digit numbers  Make and write amounts of money Make amounts of money; give change **Addition and Subtraction**  Addition/subtraction facts; missing numbers  Know how many to next multiple of 10 Add/subtract 10/20; extend to 11/21 Use facts to add several numbers Add/subtract numbers bridging 10  **Multiplication and Division** Understand multiplication as sets Understand doubles/halves to 20 **Measures**  Measure lengths in metric units; rulers Measure weights in  grams and kilograms  Measure capacities in litres Hours, minutes, seconds  Tell the time; introduce 5-minute intervals  **Addition and Subtraction** Add/subtract using facts and place value  Use facts/patterns to add/subtract Add/subtract multiples of 10 Add/subtract 11, 12, 21, 22, etc. Add/subtract near multiples of 10  Add pairs of 2-digit numbers  **Shape and Data**  Left, right, anti-/clockwise turns  Draw and describe 2-D shapes and polygons  Sort shapes: Venn and Carroll diagrams  Tally charts, block graphs and pictograms  3-D shape; edges, faces, corners | **Place Value and Fractions**  Ordinal numbers; properties of numbers Properties of numbers, e.g. odd/even  Find fraction of shapes  (, , )  Find fractions of amounts (, , )  **Addition and Subtraction**  Use facts, patterns, PV to add/subtract  Use number line + 100 grid to +/-  Find money totals: solve word problems  Add and double by partitioning  **Multiplication and Division**  Count in 2s, 5s, 10s; 5x tables facts  Division as the inverse of multiplication  Solve multiplication/ division problems  **Addition and Subtraction**  Find change Subtract by counting back  Subtract by counting up: choose a strategy  **Time**  Revise units of time and telling the time **Multiplication and Division**  Multiply by 2, 5 and 10  Division as inverse of multiplication  Multiplying and doubling and inverses  Solve divisions as inverse of multiplication | **Number, Fractions, Money**  Count 2s, 3s, 5s, 10s: multiples of 2,5,10  Count in fractions; fractions of amounts  How to find amounts of money  **Addition and Subtraction**  Add by partitioning or counting on  Choose strategies to subtract  **Revision**  Revision: addition and subtraction  Revision: multiplication, fractions, time  **Puzzles**  Maths games  Number puzzles  Logic and shape puzzles  Problem solving and investigations  **Further calculation**  Fractions of amounts: count in fractions  Tell digital and analogue time confidently  2- & 3-digit numbers on line; round to 10  Place value in 3-digit numbers |
| **Year 3** | **Place Value and Money**  Place 2-digit and 3-digit numbers on lines  Understand PV in 3-digit numbers Place value in money: add/subtract **Addition and Subtraction**  Number facts and inverse operations Using number facts to add/subtract Add/subtract: efficient mental strategies  Partitioning to add  Using place value to add/subtract Mental calculation – complements to 10  Mental subtraction – counting up  **Multiplication and Division**  Revision of 2x, 5x and 10x tables: x and ÷  Multiplication/division facts: 3x and 4x Division using facts and remainders Double nos <51; halve even nos <101 Mental strategies for x and ÷  Times tables; multiplication/division **Measures and Data**  Measure length (m/cm) and convert units  Measure weights (kg/g); use bar charts  Measure capacities (ml/l); use bar charts  Measure perimeters; use bar charts | **Place Value and Money**  Partition 3-digit numbers; place on line Understand x 100 and ÷ 100 as inverses Understand place value in money; x 10 and ÷ 10 Represent 3-digit numbers in diff ways  Place value in money; add/subtract amounts **Addition and Subtraction**  Mental addition of  2-digit numbers  Use different strategies to subtract Expanded addition:  3-digit numbers – 1  Counting up subtraction with nos>100  Expanded addition: 3-digit numbers - 2 Strategies to subtract from numbers>100  **Fractions**  Concept of a fraction; halving  Finding , , , , of amounts  Develop the concept of fractions  Finding fractions of amounts  Find unit/non-unit fractions using division  **Time and Data**  Tell time to 5 minutes;  Roman numerals Time events; units of time; pictograms  Tell the time to nearest minute Calculate/compare time intervals  Units of time: calculate intervals | **Addition and Subtraction**  Mentally add/subtract 1-digit numbers  Add/subt multiples of 10,near multiples  3-digit expanded and compact addition  Subtract large numbers using counting up  Revise expanded and column addition  Efficient strategies for mental add/subt **Fractions**  Fractions of amounts  Fractions as operators and as numbers  Add/subt same denominator fractions  **Shape**  Line symmetry; name/sort 2-D shapes  Identify, describe and sort 3-D shapes  Right angles as turns; angles in 2-D shapes Horizontal/vertical lines; 3-D shapes **Multiplication and Division**  Counting in equal steps; sequences  Revise multiplication and division facts  Partition to double, halve and multiply  Solve scaling problems  Divide numbers just beyond times tables  Gain fluency using multiplication & division  **Place Value**  PV in 4-digit numbers |
| **Year 4** | **Place Value**  Place 3- and 4-digit numbers on a line Place value in 4-digit numbers Place value additions: 4-digit numbers Deepen understanding of place value Add/subtract powers of 10, nos > 1000 Use place value in calculations  **Addition**  **and Subtraction**  Partitioning and column addition Mental subtraction incl. counting up Mental addition and subtraction Subtraction: frog with 3-D numbers Mentally add/subtract near multiples Mentally add/subtract 1-digit numbers Written subtraction  **Measures and Data**  Tell time to nearest minute: am/pm  Calculate time intervals; 24 hour clock Units of time, record data and interpret Rehearse 24 hour clock; time intervals Units of time; draw line graphs  **Multiplication and Division**  and halve 2- and 3-digit numbers Multiplication and division facts Grid multiplication using tables facts Division using efficient chunking Larger divisions with remainders | **Decimals and Fractions**  Unit and non-unit fractions of amounts Equivalent fractions; simplest form; +/- Introduction to one place decimals  Consolidate one-place decimal numbers Rehearse equivalence: fractions/decimals Decimals: x/÷ by 10/100; +/- 0.1  **Multiplication and Division**  Times tables: x/÷ facts  Times tables revision: factors and multiples Multiply multiples of 10 and 100  Grid multiplication: vertical layout  Division: chunking with remainders  **Addition and Subtraction**  Adding money using column addition  Count up to find change and differences  Column addition:4-digit numbers  Subtraction strategies; written methods  **Shape**  Draw circles, study polygons, e.g. triangles Identify and explore3-D shapes  Co-ordinates: draw polygons  Line of symmetry: identify and construct  Angle types; properties of polygons | **Addition and Subtraction**  Column addition, including money  Expanded & compact column subtraction Column subtraction, 3- & 4-digit numbers Appropriate strategies to add/subtract  Column add/subt with 3- and 4-digit numbers Choose methods for add/subt problems  **Decimals and Fractions**  Introduction: 1- and 2-place decimals Decimal/fraction equivalents, 10/100th Compare, order 2-place decimal numbers Add/subt 0.1s and 0.01s: measures problems Equivalent fractions; fraction problems  **Multiplication and Division Factors**,  multiples, mental multiplication  Scaling and correspondence problems  Efficient chunking with remainders  Multiplication problems, formal methods  Revise problems: all four operations  **Place Value**  Place and round 4-digit numbers on lines  Negative numbers in temperature  Count in 25s/1000s; Roman numerals  **Measures and Data**  Measure in m, cm, mm: convert units  Use SI units: bar charts  Find the area of rectilinear shapes  Perimeters of rectilinear shapes; area |
| **Year 5** | **Place Value**  Place value in 5-digit numbers  Place 5-digit numbers on a line; round  Place 6-digit numbers on a line; round  Deepen understanding of 6-digit numbers  **Addition and Subtraction**  Column addition  (4- and 5-digit numbers)  Decimal and money addition  Column subtraction; choose strategies  Revise addition and subtraction  **Decimals and Fractions**  Divide by 10/100;  2-place decimals  1- and 2-place decimals on a line; compare  Add/subtract multiples of 0.1/0.01  Subtract decimals with 1 or 2 places  Mixed numbers and fractions of amounts  Add/subtract equivalent fractions  **Measures and Data**  Understand metric and imperial units  Timetables and intervals: 24 hour clock  Perimeters: composite and rectilinear  Regular and irregular areas; volumes  Temperature and negative numbers  **Multiplication and Division**  Multiples, factors and word problems  Primes, divisibility, mental strategies  Grid method and short multiplication  Division of big numbers vertical layout | **Addition and Subtraction**  Column subtraction and word problems  Mental and written addition/subtraction  **Decimal and Fractions**  Place value in decimals; rounding  Column addition;  2-place decimals  Subtract decimal numbers, e.g. money  x/÷ by 10, 100, 1000; rounding decimals  Subtraction with decimals, e.g. money  Unit and non-unit fraction problems  **Multiplication and Division**  Multiples and factors; mental x/÷ strategies  Short multiplication:  4-digit nos. and money  Short division with  3- and 4-digit numbers  **Shape**  Deepen understanding of 3-D shapes  Properties of polygons; quadrilaterals  Draw/reflect shapes on co-ordinate grids  Recognise, measure and draw angles  Angle theorems; draw angles in polygons | **Place Value**  Negative numbers; count through zero  Place value in 6-digit numbers  Identify and write Roman numerals  **Decimals, Percentages ,Fractions**  Place value in 3-place decimals  Compare and use 3-place decimals  Begin to understand percentages  Subtract decimal numbers by counting up  Add/subt fractions with denominators  Multiply fractions by whole numbers  Multiply fractions by whole numbers  **Multiplication and Division**  Mental multiplication/division  Problems with multiples, factors, scaling  Division problems with short division  Grid, short and long multiplication  Solve long multiplication problems  **Addition and Subtraction**  Mental add/subt strategies revision  Column add, whole/decimal nos &  Choose subt method: column/counting up  **Measures and Data**  24-hr timetables; calculate time intervals  Draw line graphs and conversion graphs  Concept of rate; line graphs |
| **Year 6** | **Place value, Addition and Subtraction**  Place value in 6-digit numbers  Place 6-digit numbers on lines and round  Column addition and estimation  Column subtraction and estimation  Mental and written calculation strategies  **Decimals and Fractions**  Add or subtract decimals  Subtract 1-and 2- place decimals  Understand decimals w/ 3 places  Add/subtract multiples of 0.01/0/001  **Shape**  2-D shapes (circles and quadrilaterals)  Draw, translate, reflect polygons  Draw 2-D shapes: find missing angles  Construct 3-D shapes using nets  **Multiplication and Division**  Multiples, factors and prime numbers  Solve short multiplication problems  Use short division to solve problems  Long multiplication problems  Formal and mental calculation strategies  **Algebra**  Generate and use simple formulae  Solve equations w/ 2 unknowns  Generate and continue linear sequences  **Place Value, Addition and Subtraction**  Add, subtract & round 6-/7-digit numbers  Understand/calculate negative numbers  Strategies in mental and written calculation  Brackets and order of operations | **Decimals and Fractions**  Place value in 3-place decimals  Add numbers with up to 3 decimal places  Multiply/divide 2-place decimal numbers  Percentages and fractions of amounts  Multiply and divide fractions  Ratios, proportion and percentages  **Multiplication and Division**  Scale factor problems concerning area  Solve rate and scaling problems  Long division; different remainder forms  Use short/long division in problems  **Measures and Data**  Conversion: metric/imperial units; line  Time intervals, timetables, 24-hour clock  Pie-charts; find the mean of a data set  Calculate areas of different shapes  Calculate volumes of cubes/cuboids  **Ratio and Proportion**  Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts  Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison  Solve problems involving similar shapes where the scale factor is known or can be found  Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples  **Revision**  Understand decimals, including negatives  Add/subt whole numbers; solve problems  Mental strategies; written multiplication  Mental multiplication & division; ratio  Fractions, decimals and percentages  Understanding and calculating fractions | **Revision**  Areas, perimeters and volume  Shapes, angles, reflections, translations  Bar charts, pie charts, line graphs, means Algebra: unknowns and linear sequences Problem solving  **Maths around us**  Measuring ourselves and around us  Tessellation & other shape patterns  Ratios in nature and art  **Exploration in maths**  Explore a million  Number Games and Puzzles  History of maths  **Puzzles and Games**  Calculator patterns  Number patterns  Number Puzzles |