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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/identify3-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 unitsTime 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 ingrams 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 10Add pairs of 2-digit numbers**Shape and Data**Left, right, anti-/clockwise turns Draw and describe 2-D shapes and polygonsSort shapes: Venn and Carroll diagramsTally charts, block graphs and pictograms3-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 ($^{1}/\_{2}$, $^{1}/\_{4}$, $^{1}/\_{3}$) Find fractions of amounts ($^{1}/\_{2}$, $^{1}/\_{4}$, $^{1}/\_{3}$) **Addition and Subtraction**Use facts, patterns, PV to add/subtractUse 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 backSubtract 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 puzzlesProblem 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 10Place value in 3-digit numbers |
| **Year 3** | **Place Value and Money**Place 2-digit and 3-digit numbers on linesUnderstand 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 10Mental 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 of2-digit numbersUse different strategies to subtract Expanded addition:3-digit numbers – 1Counting up subtraction with nos>100 Expanded addition: 3-digit numbers - 2 Strategies to subtract from numbers>100**Fractions** Concept of a fraction; halving Finding $^{1}/\_{2}$, $^{1}/\_{4}$, $^{3}/\_{4}$, $^{1}/\_{3}$, $^{2}/\_{3}$ 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/pmCalculate 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 linesNegative numbers in temperatureCount in 25s/1000s; Roman numerals**Measures and Data**Measure in m, cm, mm: convert unitsUse SI units: bar chartsFind the area of rectilinear shapesPerimeters of rectilinear shapes; area |
| **Year 5** | **Place Value**Place value in 5-digit numbersPlace 5-digit numbers on a line; roundPlace 6-digit numbers on a line; roundDeepen understanding of 6-digit numbers**Addition and Subtraction**Column addition(4- and 5-digit numbers)Decimal and money additionColumn subtraction; choose strategiesRevise addition and subtraction**Decimals and Fractions**Divide by 10/100;2-place decimals1- and 2-place decimals on a line; compareAdd/subtract multiples of 0.1/0.01Subtract decimals with 1 or 2 placesMixed numbers and fractions of amountsAdd/subtract equivalent fractions**Measures and Data**Understand metric and imperial unitsTimetables and intervals: 24 hour clockPerimeters: composite and rectilinearRegular and irregular areas; volumesTemperature and negative numbers**Multiplication and Division**Multiples, factors and word problems Primes, divisibility, mental strategiesGrid method and short multiplicationDivision 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; roundingColumn addition;2-place decimalsSubtract decimal numbers, e.g. moneyx/÷ by 10, 100, 1000; rounding decimalsSubtraction with decimals, e.g. moneyUnit and non-unit fraction problems**Multiplication and Division**Multiples and factors; mental x/÷ strategiesShort multiplication:4-digit nos. and moneyShort division with3- and 4-digit numbers**Shape**Deepen understanding of 3-D shapesProperties of polygons; quadrilateralsDraw/reflect shapes on co-ordinate gridsRecognise, measure and draw anglesAngle theorems; draw angles in polygons | **Place Value**Negative numbers; count through zeroPlace value in 6-digit numbersIdentify and write Roman numerals**Decimals, Percentages ,Fractions**Place value in 3-place decimalsCompare and use 3-place decimalsBegin to understand percentagesSubtract decimal numbers by counting upAdd/subt fractions with denominatorsMultiply fractions by whole numbersMultiply fractions by whole numbers**Multiplication and Division**Mental multiplication/divisionProblems with multiples, factors, scalingDivision problems with short divisionGrid, short and long multiplicationSolve long multiplication problems**Addition and Subtraction**Mental add/subt strategies revisionColumn add, whole/decimal nos &Choose subt method: column/counting up**Measures and Data**24-hr timetables; calculate time intervalsDraw line graphs and conversion graphsConcept of rate; line graphs |
| **Year 6** | **Place value, Addition and Subtraction**Place value in 6-digit numbersPlace 6-digit numbers on lines and roundColumn addition and estimationColumn subtraction and estimationMental and written calculation strategies**Decimals and Fractions**Add or subtract decimalsSubtract 1-and 2- place decimalsUnderstand decimals w/ 3 placesAdd/subtract multiples of 0.01/0/001**Shape**2-D shapes (circles and quadrilaterals)Draw, translate, reflect polygonsDraw 2-D shapes: find missing anglesConstruct 3-D shapes using nets**Multiplication and Division**Multiples, factors and prime numbersSolve short multiplication problemsUse short division to solve problemsLong multiplication problemsFormal and mental calculation strategies**Algebra**Generate and use simple formulaeSolve equations w/ 2 unknownsGenerate and continue linear sequences**Place Value, Addition and Subtraction**Add, subtract & round 6-/7-digit numbers Understand/calculate negative numbersStrategies in mental and written calculationBrackets and order of operations | **Decimals and Fractions**Place value in 3-place decimalsAdd numbers with up to 3 decimal placesMultiply/divide 2-place decimal numbersPercentages and fractions of amountsMultiply and divide fractionsRatios, proportion and percentages**Multiplication and Division**Scale factor problems concerning areaSolve rate and scaling problemsLong division; different remainder formsUse short/long division in problems**Measures and Data**Conversion: metric/imperial units; lineTime intervals, timetables, 24-hour clockPie-charts; find the mean of a data setCalculate areas of different shapesCalculate 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 negativesAdd/subt whole numbers; solve problemsMental strategies; written multiplicationMental multiplication & division; ratioFractions, decimals and percentagesUnderstanding 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 usTessellation & 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 |