|  |  |
| --- | --- |
| Place Value, Addition and Subtraction | Decimals and Fractions (A) |
| Unit 1 | Unit 2 | Unit 3 | Unit 4 | Unit 5 | Unit 1 | Unit 2 | Unit 3 | Unit 4 |
| Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 4 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 |
| 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 | Add or subtract decimals | Subtract 1- and 2-place decimals | Understand decimals with three places | Add/subtract multiples of 0.1, 0.01, 0.001 |
| 1a *Use a range of representations to develop and secure understanding of place value*1b *Apply understanding of number value to round and approximate* | 1f *Use + / - confidently, efficiently and accurately with integers* | *1f Use the four arithmetic operations with decimals* | *1b Use a range of representations to extend understanding of the number system to decimals; place decimals on a number line* |
| Outcome: 4 | Outcomes: 1, 2 | Outcomes: 6 | Outcomes: 7 | Outcomes: 5, 8 | Outcomes: 30 | Outcomes: 29, 31 | Outcomes: 28 |

|  |  |
| --- | --- |
| Algebra  | Multiplication and Division |
| Unit 1 | Unit 2 | Unit 3 | Unit 1 | Unit 2 | Unit 3 | Unit 4 | Unit 5 |
| Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 3 | Day 4 | Day 1 | Day 2 | Day 3 | Day 4 | Day 1 | Day 2 |
| Generate and use simple formulae | Solve equations with two unknowns | Generate and continue linear sequences | Multiples, factors and prime numbers | Solve short multiplication problems | Use short division to solve problems | Long multiplication problems | Formal / informal strategies |
| 2a *Explore and create patterns; explain sequences in words and by generalising them*2d *Use expressions and equations to represent unknown values, adopting the conventions of algebra; Use inverse operations to find unknown values*  | 1f  *Use × / ÷ confidently, efficiently and accurately with integers*1h *Recall and use multiplication facts up to at least 10 x 10* |
|  | 2b *Use commutativity, distributivity and associativity to explore equality and inequality of expressions.* | 2c *Demonstrate an understanding of the idea of input, application of a rule (including inverse operations)*  | 1i *Explore properties of number* | 1b *Apply understanding of number value to round and approximate appropriately*1e V*erify calculations and statements about number by inverse reasoning and approximation methods* |
| Outcomes: 36  | Outcomes: 37, 38 | Outcomes: 39 | Outcomes: 9, 10, 14, 18 | Outcomes: 9, 11 | Outcomes: 9, 15, 16 | Outcomes: 9, 12 | Outcomes: 18, 19, 20 |

|  |  |
| --- | --- |
| Decimals and Fractions (B) | Shape |
| Unit 1 | Unit 2 | Unit 1 | Unit 2 | Unit 3 | Unit 4 |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 |
| Decimals, fractions: compare, order | Equivalent fractions: add and subtract | 2-D shapes (circles and quadrilaterals) | Draw, translate, reflect polygons | Draw 2-D shapes; find missing angles | Construct 3-D shapes using nets |
| 1b *Use a range of representations to extend understanding of the number system to fractions; place fractions on a number line*1c *Use knowledge of fractions, e.g. to compare and convert* | 3d *Consolidate understanding of 2-D shapes* | 3h *Use co-ordinates to solve problems involving position, length and shape* | 3d *Consolidate understanding of 2-D shapes.**3i Understand angle as a measure of rotation and recognise, name and describe types of angles* | 3f *Relate a 3-D shape to its 2-D nets* |
| Outcomes: 37 | Outcomes: 33, 37 | Outcomes:51, 53 | Outcomes: 54, 55 | Outcomes: 49, 52 | Outcomes: 50 |

|  |
| --- |
| More Place Value, Addition and Subtraction |
| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
| Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 |
| Add, subtract & round 6-/7-digit numbers | Understand/calculate negative numbers | Strategies in mental & written calc. | Use brackets and order of operations |
| 1a *Use a range of representations to secure understanding of place value*1b *Apply understanding of number value to round and approximate* | 1b *Extend understanding of the number system to negative values* | 1f *Use + / - confidently, efficiently and accurately with integers* |
|
| Outcomes: 1, 2, 4 | Outcomes: 3, 4 | Outcomes:4, 5 | Outcomes: 8, 18 |

|  |  |
| --- | --- |
| Decimals and Fractions (A) | Data |
| Unit 1 | Unit 2 | Unit 3 | Unit 1 | Unit 2 | Unit 3 |
| Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 4 | Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 4 |
| Place value in 3-place decimals | Add numbers with up to 3 decimal places | Multiply/divide 2-place decimal numbers | Conversion: metric/imperial units; line graphs | Time intervals, timetables, 24-hour clock | Pie-charts; find the mean of a data set |
| 1b *Use a range of representations to extend understanding of the number system to include decimals; apply understanding of number value to round and approximate*1f *Use the four arithmetic operations confidently, efficiently and accurately with decimals* | 3c *Convert between standard units, inc. applying my understanding of place value to convert between metric units* |  3a *Read analogue and digital clocks accurately and perform calculations involving time* | 4b *Represent information by creating a variety of appropriate charts of increasing complexity*4d *Find and use the mean of a simple set of data* |
| Outcomes: 28 | Outcomes: 30 | Outcomes: 32 | Outcomes: 40, 41, 47 | Outcomes: 45 | Outcomes: 47, 48 |

|  |  |
| --- | --- |
| Multiplication and Division (A) | Decimals and Fractions (B) |
| Unit 1 | Unit 2 | Unit 1 | Unit 2 | Unit 3 |
| Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 3 | Day 4 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 3 |
| Scale factor problems concerning area | Solve rate and scaling problems | Percentages and fractions of amounts | Multiply and divide fractions | Ratios, proportion and percentages |
| 1g *Extend understanding of multiplicative reasoning to include the application of proportion and scale* | 1c *Understand that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages; use knowledge of equivalence to compare the size of simple fractions and convert between representations*1d *Use a fraction as an operator* | 1g *Extend understanding of multiplicative reasoning to include the concept and application of ratio and proportion*  |
| Outcome: 13, 34, 35 | Outcomes: 9, 10, 13, 14 | Outcomes: 21, 22, 24, 33 | Outcomes: 25, 26, 27 | Outcomes: 23, 33, 35 |

|  |  |
| --- | --- |
| Measures  | Multiplication and Division (B) |
| Unit 1 | Unit 2 | Unit 1 | Unit 2 | Unit 3 |
| Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 3 |
| Calculate areas of different shapes | Calculate volumes of cubes/cuboids | Long division; different remainder forms | Use short/long multiplication in problems | Use short/long division in problems |
| *3g Use efficient methods for finding the perimeter and area of two-dimensional shapes; understand how basic formulae are derived* | 1f *Use × / ÷ confidently, efficiently and accurately with integers*1e *Verify calculations and statements about number by inverse reasoning and approximation methods* |
| Outcomes: 42, 43 | Outcomes: 44 | Outcomes: 15, 17 | Outcomes: 11, 12, 19 | Outcomes: 15, 16, 17, 19 |

|  |
| --- |
| Spr/Sum Revision Menu A |
| Unit 1 | Unit 2 | Unit 3 | Unit 4 | Unit 5 | Unit 6 |
| Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 4 | Day 1 | Day 2 | Day 1 | Day 2 | Day 1 | Day 2 |
| Understand decimals, including negatives | Add/subtract whole numbers; solve problems | Mental and written multiplication/division | Mental multiplication & division; ratio | Fractions, decimals and percentages | Understanding and calculating fractions |
| 1a *Use a range of representations to develop and secure understanding of place value*1b *Extend understanding of the number system to negative values* | 1f *Use+ / - / × / ÷ confidently, efficiently and accurately with integers*1e *Verify calculations and statements about number by inverse reasoning and approximation methods* | 1g *Extend understanding of multiplicative reasoning to include the application of ratio, proportion and scale* | 1c *Understand that non-integer quantities can be represented using fractions (including fractions greater than 1), decimals and percentages; use knowledge of equivalence to compare the size of simple fractions and convert between representations*1d *Use a fraction as an operator* |
| Outcomes: 1, 2, 3, 4, 28 | Outcomes:4, 5, 6, 7, 19 | Outcomes: 9, 10, 11, 12, 14, 15, 16, 17 | Outcomes: 32, 35 | Outcomes: 23, 33 | Outs: 22, 25, 26, 27 |

|  |
| --- |
| Spr/Sum Revision Menu B |
| Unit 1 | Unit 2 | Unit 3 | Unit 4 | Unit 5 |
| Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 1 | Day 2 |
| Areas, perimeters and volume | Shapes, angles, reflections, translations | Bar charts, pie charts, line graphs, means | Algebra: unknowns and linear sequences | Problem solving |
| *3g Use efficient methods for finding the perimeter and area of two-dimensional shapes; understand how basic formulae are derived* | 3d *Consolidate understanding of 2-D shapes*3f *Relate a 3-D shape to its 2-D nets*3h *Use co-ordinates to solve problems involving position, length and shape**3i Understand angle as a measure of rotation and recognise, name and describe types of angles* | 4b *Represent information by creating a variety of appropriate charts of increasing complexity*4d *Find and use the mean of a simple set of data* | 2a *Explore and create patterns; explain sequences in words and by generalising them*2d *Use expressions and equations to represent unknown values, adopting the conventions of algebra; Use inverse operations to find unknown values* | 1f *Use+ / - / × / ÷ confidently, efficiently and accurately with integers*1e *Verify calculations and statements about number by inverse reasoning and approximation methods* |
| Outcomes: 36, 42, 44 | Outcomes: 49, 50, 52, 54 | Outcomes: 47, 48 | Outcomes: 37, 38 | Outcomes: 8, 20 |

|  |  |
| --- | --- |
| Exploration in Maths | Maths Around Us |
| Unit 1 | Unit 2 | Unit 3 | Unit 1 | Unit 2 | Unit 3 |
| Day 1 | Day 2 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 |
| Explore a million | Number games and puzzles | History of maths | Measuring ourselves and around us | Tessellation & other shape patterns | Ratios in nature and art |
| 1a *Read, record and interpret numbers, using figures and words up to at least one million* | 2a *Explore and create patterns of numbers and shapes; explain numerical sequences and spatial patterns in words and by generalising them* | 3b *Estimate and measure length, capacity, mass, using appropriate standard units* | 3d *Consolidate understanding of 2-D shapes**3i Understand angle as a measure of rotation and recognise, name and describe types of angles* | 1g *Extend understanding of multiplicative reasoning to include the application of ratio and proportion*  |
|  | 1e *Verify calculations and statements about number by inverse reasoning and approximation methods* |
| Outcomes: 4, 19, 40, 41 | Outcomes: 5, 18, 55 | Outcomes: 4, 9, 19, 36, 55 | Outcomes: 4, 19, 20, 34, 40, 41, 47, 48, 55 | Outcomes: 49 | Outcomes: 19, 35, 39, 40, 48 |

|  |
| --- |
| Puzzles and Patterns |
| Unit 1 | Unit 2 | Unit 3 |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Day 1 | Day 2 | Day 3 | Day 1 | Day 2 |
| Calculator patterns | Number puzzles | Number patterns |
| 1c *Convert between fractions and decimals*2d *Model problems; use inverse operations to find unknown values* | 2*a* *Explore and create patterns of numbers and shapes; explain numerical sequences and spatial patterns in words and by generalising them* |
| Outcomes: 18, 19, 20, 24, 55 | Outcomes: 37, 38, 55 | Outcomes: 11, 16, 17, 53, 55 |