| Oral/Mental starter: mental strategies, rapid recall, estimating, visual imagery, problem solving, explaining methods etc. are all covered in the left-hand page for each spread and enhanced by teacher input (with relevant mental questions in the Teacher's Resource). The calculations policy is to be covered regularly in lessons in the form of starters/plenaries or embedded into the topics |  |  |  |
| :---: | :---: | :---: | :---: |
| CHAPTE | TOPIC | Content | ObJECTIVES: pupils will be taught to... |
|  | SUMMER BOOKLET | Go THROUGH THE SUMMER BOOKLET | IDENTIFY AREAS OF DEVELOPMENT AND STARTING POINT FOR NUMERACY WORK |
| 1 | Whole Numbers and Decimals <br> Topic 5 Place value, ordering and rounding of integers, powers and roots. <br> Topic 1 Mental and Written Calculations. | Place value <br> Ordering whole numbers <br> Decimals and money <br> Adding decimals <br> Temperature <br> Rounding and estimating Order of operations | - Use place value and decimal notation in different context, including money <br> - Compare and order whole numbers <br> - Add decimals using mental and written methods <br> - Understand and order negative numbers in the context of temperature <br> - Round and number to the nearest $10,100,1000$ <br> - Use and estimate to check a result <br> - Use the order of operations |
| 2 | Measures, Perimeter and Area <br> Topic 1 Mental and Written Calculations. <br> Topic 5 Place value, ordering and rounding of integers, powers \& roots. | Measuring lines <br> Reading scales <br> Time <br> Shapes <br> Perimeter <br> Area <br> Metric units | - Measure lengths in centimetres and millimetres <br> - Read and interpret scales in different contexts, including time <br> - Classify 2D shapes by their properties <br> - Calculate the perimeter of simple shapes <br> - Calculate or estimate the area of a shape by counting squares <br> - Choose and use standard metric units of measure |
| Revision and Half Term Assessment 1 To be completed after chapter 3. Homework to be used for revision. |  |  | 1 lesson on Numeracy revision and 1 lesson revision techniques, 1 lesson on test, 1 feedback. |
| HALF TERM |  |  |  |
| 3 | Expressions and Formulae | Using letters 1 <br> Using letters 2 <br> Adding with symbols <br> Simplifying expressions <br> Substitution <br> Creating a formula | - Use letters to represent unknown numbers <br> - Simplify algebraic expressions by collecting like terms <br> - Substitute whole numbers into expressions and formulae <br> - Derive a simple formula |
| 4 | Fractions, Decimals and Percentages <br> Topic 9 Fractions, decimals, percentages, ratio and proportion. | Writing fractions Equivalent fractions Improper fractions Fractions of an amount 1 Fractions of an amount 2 Percentages Finding percentages Fractions, decimals and percentages | - Use fractions to describe parts of a whole, including improper fractions <br> - Identify equivalent fractions <br> - Find fractions of a quantity <br> - Calculate simple percentages, including problems involving money <br> - Express a proportion as a fraction, a decimal or a percentage |


| 5 | Angles and 2D Shapes | Angles <br> Adding angles <br> Measuring angles <br> Finding angles at a point <br> Calculating angles <br> Properties of triangles <br> Angles in a triangle <br> Compass turns | - Estimate angles and use a protractor to measure them <br> - Distinguish between acute, obtuse and reflex angles <br> - Use the sum of angles at a point, on a straight line and in a triangle <br> - Classify triangles by their properties <br> - Find missing angles in a triangle <br> - Understand and use the points of a compass |
| :---: | :---: | :---: | :---: |
| Revisions and Half Term Assessment 2 <br> Homework to be used for revision To be completed after chapter 6. |  |  | 1 lesson on Numeracy revision and 1 lesson revision techniques, 1 lesson on test, 1 feedback. |
| CHRISTMAS |  |  |  |
| Mymaths: Book 1A - Year 7 SCHEME OF WORK LEVELS 3 To 5 |  |  | SPRING |
| Chapte <br> R | TOPIC | Content | ObJECTIVES: pupils will be taught to. . . |
| 6 | Graphs | Coordinates <br> Coordinates with negative numbers <br> Reading graphs <br> Line graphs 1 <br> Line graphs 2 | - Identify and plot coordinates in all four quadrants <br> - Construct and interpret line graphs in context |
| 7 | Adding and Subtracting <br> Topic 1 Mental and Written Calculations. | Mental methods of addition Mental methods of subtraction Written addition and subtraction 1 Written addition and subtraction 2 | - Strengthen and extend mental methods of addition and subtraction <br> - Use efficient written methods to add and subtract whole numbers |
| 8 | Statistics | Planning and collecting data <br> Organising data <br> Reading lists and tables <br> Reading and drawing pictograms <br> Reading and drawing bar charts <br> Reading pie charts <br> Averages - the mode <br> Averages - the median <br> Comparing data - range and average | - Plan how to collect and organise small sets of data from surveys and experiments <br> - Solve problems by interpreting data in lists and tables <br> - Construct and interpret statistical diagrams, including pictograms, bar charts, pie charts and line graphs <br> - Calculate statistics for small sets of data, including the mode, median and range |
| Revision and Half Term Assessment 3 Homework to be used for revision |  | To be completed after chapter 9. | 1 lesson on Numeracy revision and 1 lesson revision techniques, 1 lesson on test, 1 feedback.. |
| HALF TERM |  |  |  |
| 9 | Transformations and Symmetry | Lines of symmetry Reflection Translation | - Identify lines of symmetry in a 2D shape <br> - Transform a shape by reflection in a mirror line |


|  |  | Rotation Tessellations | - Transform a shape by translation and describe a translation <br> - Transform a shape by rotation about a point <br> - Create tessellations using reflections, rotations and translations |
| :---: | :---: | :---: | :---: |
| 10 | Equations | Operations Inverse operations Using letters 3 Equations 1 Equations 2 | - Represent functions as sequences of operations <br> - Understand and use inverse operations <br> - Use letters to represent unknown numbers <br> - Construct and solve simple equations <br> - Solve two step equations |
| Revision and Half Term Assessment 4 To be completed after chapter 11. feedback..Homework to be used for revision |  |  | 1 lesson on Numeracy revision and 1 lesson revision techniques, 1 lesson on test, 1 |
| EASTER |  |  |  |

## Mymaths: Book 1A - Year 7 Scheme of work

Levels 3 TO 5
Summer

| $\begin{array}{\|l} \hline \text { CHAPTE } \\ \mathrm{R} \\ \hline \end{array}$ | TOPIC | Content | ObJECTIVES: pupils will be taught to... |
| :---: | :---: | :---: | :---: |
| 11 | Factors and Multiples <br> Topic 5 Place value, ordering and rounding of integers, powers and roots. | Factors <br> Multiples <br> Tests of divisibility Square numbers | - Recognise and list factors and multiples <br> - Use simple tests of divisibility <br> - Recognise squares of numbers up to $10 \times 10$ |
| 15 | Ratio and Proportion <br> Topic 5 Place value, ordering and rounding of integers, powers and roots. | Ration and proportion Ration and proportion problems Solving arithmetic problems Scale drawings | - Write and use rations and proportions <br> - Solve simple problems involving ratio and proportion <br> - Solve arithmetic problems in context <br> - Construct and interpret scale drawings |
| 13 | Sequences | Sequences <br> Describing sequences <br> Using rules <br> Sequences with negative numbers | - Find patterns and sequences of numbers <br> - Describe a sequence using a rule to find the next term <br> - Generate terms in sequence using a rule <br> - Use negative numbers in a sequence |

Revision and Optional Assessment (end of year exams. Homework to be used for revision

| HALF TERM |  |  |  |
| :---: | :---: | :---: | :---: |
| 14 | Multiplying and dividing <br> Topic 1 Mental and Written Calculations. | Multiplication <br> Multiplying by 10 and 100 <br> Mental methods of multiplication <br> Written methods of multiplication <br> Mental methods of division <br> Division problems <br> Written methods of division <br> Calculator skills | - Consolidate multiplication facts up to $12 \times 12$ <br> - Multiply by 10 and 100 <br> - Multiply whole numbers using mental and written methods <br> - Divide whole numbers using mental and efficient written methods <br> - Use a calculator and interpret the display in different contexts, including money |
| 12 | Constructions and 3D Shapes | 3D shapes <br> Nets of cubes <br> Nets of other 3D shapes <br> 2D representation of 3D shapes <br> Measuring and drawing angles <br> Drawing a triangle <br> Introducing circles | - Recognise and name common 3D shapes <br> - Construct simple nets of 3D shapes <br> - Use 2D representation to visualise 3D shapes <br> - Use a protractor to measure and draw angles <br> - Use a ruler and protractor to construct a triangle <br> - Know the parts of a circle |
| 16 | Probability | Introducing probability <br> The probability scale 1 <br> The probability scale 2 <br> Sorting with Venn diagrams | - Use the vocabulary and ideas of probability, drawing on experience <br> - Understand and use the probability scale from 0 to 1 <br> - Sort objects using a Venn diagram |
| SUMMER HOLIDAY |  |  |  |

