https://www.mathsgenie.co.uk/gcse.html

| Grade 1 | Grade 2 |
| :--- | :--- |
| Addition and <br> Subtraction | Calculation Problems  <br>  Using a Calculator <br> Multiplication and <br> Division Systematic Listing <br> Fractions of an <br> Amount <br> Time Fractions, Decimals <br> and Percentages <br> Writing, Simplifying <br> and Ordering Fractions  <br> Place Value Writing an Expression <br> Rounding Function Machines  <br> Negative Numbers Solving One Step <br> Equations <br> Powers and Roots  <br> BlDMAS  <br> Factors and Multiples  <br> Coordinates Area and Perimeter <br> Probability <br> Frequency Polygons <br> Averages <br> Bar Charts <br> Stem and Leaf <br> Pie Charts |


| Grade 3 | Grade 4 |
| :---: | :---: |
| Error Intervals | Compound Interest and Depreciation |
| Fractions |  |
| Estimating | Indices |
| Writing and Simplifying | Prime Factors, HCF and LCM |
| Ratio | Real Life and Distance Time Graphs |
| Ratio |  |
| Proportion | Inequalities |
| Percentages | Forming and Solving Equations |
| Percentage Change | Sequences (Nth Term) |
| Exchange Rates | Expanding and Factorising |
| Conversions and Units | Pythagoras |
| Scale Drawings | Angles in Parallel Lines |
| Best Buy Questions | Angles in Polygons |
| Substitution | Surface Area |
| Solving Equations | Volume of a Prism |
| Drawing Graphs | Cylinders |
| Area and Circumference | Loci and Construction |
|  | Bearings |
| Transformations | Plans and Elevations |
| Area of Compound Shapes | Averages from Frequency Tables |
| Frequency Trees | Probability |
| Two Way Tables | Scatter Graphs |

## Grade 5

Writing a Ratio as a Fraction or Linear
Function

Direct and Inverse Proportion

| Reverse Percentages |
| :--- |
| Standard Form |
| Speed and Density |
| Changing the Subject of a Formula |

Expanding and Factorising Quadratics
Solving Quadratics

Drawing Quadratic Graphs
Drawing Other Graphs: Cubic/Reciprocal
Simultaneous Equations
Solving Simultaneous Equations
Graphically
Midpoint of a Line Segment
Gradient of a Line
Equation of a Line
Spheres and Cones
Sector Areas and Arc Lengths
Similar Shapes (Lengths)
SOHCAHTOA (Trigonometry)
Exact trig values
Vectors
Probability Trees
Venn Diagrams

## https://www.sparxmaths.uk/ Independent study

