| Week | Higher  | Foundation  |
|------|---|---|
| 1    | Number: Product of prime                                | Number: Calculations, decimals,   |
|      | factors, HCF & LCM, Indices,                            | factors & multiples, squares, cubes &                                       |
|      | standard form, surds.                                   | roots, indices, prime factors, standard                                     |
|      |   | form.   |
| 2    | Algebra: Expanding and                                  | Algebra: Writing expressions,   |
|      | factorising, solving equations,                         | simplifying expressions, substitution,                                      |
|      | using formulae, nth term of                             | using formulae, factorising &   |
|      | sequences.  | expanding.  |
| 3    | Interpreting and representing                           | Charts, tables and graphs: Frequency  |
|      | data: Scatter graphs, averages &                        | tables, two-way tables, stem & leaf,  |
|      | range, cumulative frequency,                            | pie charts, scatter graphs.   |
|      | box plots, histograms.                                  |   |
| 4    | Fractions, ratio and percentages:                       | Fractions and percentages: Adding,  |
|      | calculations with fractions, solving                    | subtracting, multiplying and dividing                                       |
|      | problems with ratio, direct                             | fractions. Calculating percentages.   |
|      | proportion, inverse proportion.                         | Converting between fractions,   |
| _    |   | decimals and percentages.   |
| 5    | Angles and trigonometry: Angle                          | Equations, inequalities and   |
|      | properties of triangles and                             | sequences: Solving equations, nth   |
|      | quadrilaterals, interior & exterior                     | term of sequences, solving  |
|      | angles, Pythagoras, trigonometry.                       | inequalities, solving quadratic   |
| ,    | Cyana hay Lina ay ayaya laa ya ay lifa                  | equations.  |
| 6    | <b>Graphs:</b> Linear graphs, real-life                 | <b>Angles:</b> Angles in parallel lines, angles                             |
|      | graphs, quadratic graphs, cubic                         | in triangles, interior & exterior angles.                                   |
| 7    | & reciprocal graphs. <b>Area and volume:</b> Perimeter, | Averages and range: Mean modian   |
| /    | area, converting between                                | <b>Averages and range:</b> Mean, median, mode, range. Averages from tables. |
|      | different units, volume of prisms,                      | Mode, range. Averages nom rables.   |
|      | circles, cylinders & spheres,                           |   |
|      | pyramids & cones.                                       |   |
| 8    | Transformations and                                     | Perimeter, area and volume:   |
|      | constructions: Reflection,                              | Calculating area of rectangles,   |
|      | rotation, enlargement,                                  | parallelograms, triangles, trapezia,  |
|      | translation, bearings, scale                            | changing units, compound shapes,  |
|      | drawing, constructions, loci.                           | surface area, volume, circumference   |
|      |   | & area of a circle and parts of circles,                                    |
|      |   | volume of cylinders, pyramids, cones,                                       |
|      |   | spheres & compound solids.  |
| 9    | Equations and inequalities:                             | Graphs: Coordinates, linear graphs,   |
|      | Solving quadratic equations,                            | real-life graphs, plotting & using  |
|      | solving simultaneous equations,                         | quadratic graphs.   |
|      | solving inequalities.                                   |   |
| 10   | Probability: Calculating                                | <b>Transformations:</b> Translation, reflection,                            |
|      | probabilities, tree diagrams,                           | rotation, enlargement.  |
|      | conditional probability, venn                           |   |
|      | diagrams.   | <b>D</b> 10 11 11 11 11 11 11 11 11 11 11 11 11                             |
| 11   | Compound measures: Speed /                              | Ratio and proportion: Writing & using                                       |
|      | distance / time, mass / density /                       | ratios, direct & inverse proportion.  |
|      | volume, force / pressure / area.                        |   |

| 12 | Similarity and congruence: Similarity, similarity in 3d solids, congruence.   | <b>Right angled triangles:</b> Pythagoras, trigonometry.  |
|----|---|---|
| 13 | Further trigonometry: Graphs of sine, cosine and tangent functions, Sine rule and sine formula for area, cosine rule, 3d trig problems, transforming trig graphs. | <b>Probability:</b> Calculating probability, venn diagrams, tree diagrams.  |
| 14 | <b>Circle theorems:</b> Using, explaining and proving.  | Compound measures: speed / distance / time, mass / density / volume, force / pressure / area.                           |
| 15 | Further algebra: Rearranging formulae, algebraic fractions, functions, proof, transformations of functions, iteration.  | Constructions, loci and bearings: plans & elevations, scale drawings, constructions, loci, bearings.                    |
| 16 | <b>Vectors:</b> vector notation, vector arithmetic, vector proof.   | Congruence, similarity & vectors:<br>Similarity & enlargement, vectors.   |
| 17 | Further graphs: Estimating & interpreting gradient of graphs at a point, estimating and interpreting area under a curve.  | Further algebra: Graphs of cubic and reciprocal functions, solving simultaneous equations, rearranging formulae, proof. |