Mathematics

Year 10 Higher Group

Half Term 1

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| --- | --- |
| Number of Hours | Topic |
| 4 | Calculations, checking and rounding  Page1 -5 / 363 / 12 / 16 |
| 4 | Indices, roots, reciprocals and hierarchy of operations  Page 65 / / / |
| 7 | Factors, multiples, primes, standard form and surds  Page 5 / 7 / 71 / 73 |
| 10 | Algebra: the basics, setting up, rearranging and solving equations  Page 51 / 83 / 80 |
| 4 | Sequences  Page 118 - 126 |
| 4 | Averages and range  Page 330 |
| Reasons behind order of topic in this half term | |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.  Y10 starts with some challenging number topics such as surds, indices and standard form.  Parts of the Algebra content must be covered before the first key assessment and involves rearranging equations, sequences (including dinding the nth term of a quadratic sequence).  Averages and range (KS3) can be taught very quickly before the harder topics in term 2. | |

Mathematics

Year 10 Higher Group

Half Term 2

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| Number of Hours | Topic |
| 5 | Representing and interpreting data and scatter graphs  Page 337 |
| 4 | Collecting data  Page 321 |
| 6 | Cumulative frequency, box plots and histograms  Page 344 |
| 12 | Fractions and percentages  Page 17 / 40 |
| Reasons behind order of topic in this half term | |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.  Statistics topics such as Histograms, cumulative frequency graphs and box plots are taught in term 2.  Fractions and percentages finish off the number work. | |

Mathematics

Year 10 Higher Group

Half Term 3

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| --- | --- |
| Number of Hours | Topic |
| 6 | Ratio and proportion  Page 29 |
| 6 | Polygons, angles and parallel lines  Page 203 |
| 6 | Pythagoras’ Theorem and trigonometry  Page 249 |
| 6 | Graphs: the basics and real-life graphs  Page 157 |
| Reasons behind order of topic in this half term | |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.  Ratio and proportion feature heavily at GCSE and appear in the next key assessment.  Geometry is taught via angles, pythagoras and trigonometry and should have been covered during KS3.  Basic and real-life graphs start the majority of the graph content covered in term 3. | |

Mathematics

Year 10 Higher Group

Half Term 4

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| Number of Hours | Topic |
| 8 | Linear graphs and coordinate geometry  Page 127 |
| 6 | Quadratic, cubic and other graphs  Page 140 |
| 5 | Perimeter, area and circles  Page 276 |
| 7 | 3D forms and volume, cylinders, cones and spheres  Page 284 |
| Reasons behind order of topic in this half term | |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.  Higher knowledge of graphs is needed for the next key assessment and is fundamental in answering many of the algebra questions.  A major propotion of the geometry content is finished at the end of the term with area and volume. | |

Mathematics

Year 10 Higher Group

Half Term 5

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| Number of Hours | Topic |
| 5 | Accuracy and bounds  Page 12 |
| 6 | Transformations  Page 297 |
| 7 | Constructions, loci and bearings  Page 237 |
| Reasons behind order of topic in this half term | |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.  Number contains some challenging questions involving upper and lower bounds and must be covered in detail.  Transformations also appear on the mock exam and link in with constructions ,loci and bearings. | |

Mathematics

Year 10 Higher Group

Half Term 6

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| Number of Hours | Topic |
| 7 | Solving quadratic and simultaneous equations  Page 98 |
| 6 | Inequalities  Page 110 |
| 8 | Probability  Page 359 |
| 8 | Multiplicative reasoning  Page 224 / 228 |
| Reasons behind order of topic in this half term | |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.  The final algebra content involves some challenging topics such as simultaneous equations and quadratic inequlaties.  Probability again challenges students and contains some of the hardest questions on the Higher tier. | |

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| Reasons behind order of topics in this Year |
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