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| **Curriculum Plan for Parents – Year 10 Foundation GCSE (from 2016) (Edexcel exam board)** |

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| **Subject** | Mathematics | **Contact Person** | Mrs Shaw / Mrs Landy |

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| **Half term and topic** | **Your child will learn....** | **Key Homework** | **Assessment** |
| **Autumn 1**  Number  Algebra | Inverse operations; BODMAS; rounding; estimating; powers and roots; surd notation; use of venn diagrams to find HCF and LCM; products of prime factors; add, subtract, multiply and divide algebraic expressions; Index Laws; substitution; expand single and double brackets; factorise expressions; | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). | October – formal assessment using a non-calculator GCSE past paper |
| **Autumn 2**  Diagrams & Charts  Fractions  Percentages  Algebra | Design data collection sheets; frequency tables; two-way tables; bar charts; line graphs; frequency polygons; time series graphs; pie charts; stem & leaf diagrams; scattergraphs and correlation; calculate with fractions and mixed numbers; change between FDP; percentage change; simple interest; real-life percentage problems; solve two-step equations; equations with brackets; equations with the unknown on both sides; inequalities; | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). |  |
| **Spring 1**  Algebra  Angles  Averages | Algebra (continued); change the subject of a formula; find and use the nth term of a linear sequence; recognise congruent shapes; use the angle properties of parallel lines to solve problems; interior and exterior angles of polygons; calculate the averages from a list; calculate the averages from ungrouped and grouped frequency tables; find the averages from a stem & leaf diagram; | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). | February – mid-year examinations (non-calculator and calculator GCSE past papers) |
| **Spring 2**  Averages  Perimeter  Area  Volume  Graphs | Averages (continued); estimate the mean of grouped data; understand sampling; understand bias; perimeter; calculate the area of squares, rectangles, parallelograms, triangles, trapezia and compound shapes; volume and surface area of prisms; convert between different units for area; convert between different units for volume; find the mid-point of a line segment on a graph; plot a straight line from a table of value; plot a straight line from its equation; understand y = mx + c; | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). |  |
| **Summer 1**  Graphs  Transformations  Ratio & Proportion | Graphs (continued); draw and interpret real-life graphs; use distance-time graphs to solve problems; interpret rate of change graphs; draw and describe single transformations; combine transformations; use ratios to convert between units; solve ratio problems; divide a quantity into parts using a given ratio; | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). |  |
| **Summer 2**  Ratio & Proportion  Revision of all Topics | Ratio & Proportion (continued); solve worded proportion problems; understand and use the unitary method; recognise direct and inverse proportion; | Homework will be set once each week to consolidate learning and provide challenge to promote independent thought. (Homework may be revision in the run-up to a test). | June – end-of-year examinations (non-calculator and calculator GCSE past papers) |

Mathematics at Holly Lodge supports the GCSE Maths qualification provided by the Edexcel examination board. Further details can be found at <https://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-2015.html>