Year 11 – Foundation

Learning Landmark (LL) assessments:

| Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|----------------------|----------------------|----------------------|----------------------|----------|----------|
| LL1: Foundation GCSE | LL2: Foundation GCSE | LL3: Foundation GCSE | LL4: Foundation GCSE | N/A | N/A |
| Exam Paper | Exam Paper (Mock 1) | Exam Paper | Exam Paper (Mock 2) | | |

Content Covered:

| Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|--|---|--|----------|----------|----------|
| Theme 1: Number & | Theme 6: Sequences | Theme 8: Geometry | Revision | Revision | N/A |
| Calculation | | | | | |
| Revision of previous content | Revision of previous content | Revision of content | | | |
| Multi-step problems involving addition, subtraction, multiplication, division, powers and roots | Recognise and describe geometric sequences | Surface area of spheres and cones | | | |
| The order of operations including powers and roots (BIDMAS) | Finding missing terms in a geometric sequence | Surface area of a composite solid (shapes made up of 2 or more 3D shapes) | | | |
| Theme 2: Shapes & Angles | Combine geometric sequences with fractions and surds | Solve practical problems involving surface area | | | |
| Revision of previous year's content in this area | Solve problems involving geometric sequences | Volume of spheres and cones | | | |
| Solving problems involving loci | Non-standard sequences | Volume of a composite solid (shapes made up of 2 or more 3D shapes) | | | |
| Constructing the locus of points a fixed distance from a point & a line | Theme 7: Data & Probability | Solve practical problems involving Volume of solids (including algebra) | | | |
| Techniques to construct 2D shapes; e.g. rhombus | Revision of previous year's content in this area | The ratio of corresponding sides in similar triangles is constant | | | |
| The conditions for triangles to be congruent and proofs | Harder set notation and link to section of Venn diagram | Trigonometry including trigonometric ratios | | | |
| Similar shapes with parallel lines and embedded shapes | Probability from Venn using set notation | Sine, cosine and tangent are functions of an angle | | | |
| Theme 3: Fractions, | Sampling | Establish the exact values of $\sin\theta$ and | | | |
| Decimals & Percentages | | $\cos \theta$ for $\theta = 0^{\circ}$, 30° , 45° , 60° and 90° | | | |
| Revision of previous content | Averages and range from a discrete frequency table | Exact value of tan θ for θ = 0°, 30°, 45° and 60° | | | |

| Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|---|--|--|----------|----------|----------|
| Theme 4: Algebra | Comparing sets of data and the limitations of different statistics (mean, median, mode, range) | The sine, cosine and tangent of an angle | | | |
| Revision of previous year's content in this area | Combining means | Trigonometric equations to find missing side/angle in a right-angled triangle | | | |
| Quadratic equations including solving a quadratic in factorised form | Modal class of set of grouped data | Trigonometric equations when the unknown is in denominator of a fraction | | | |
| Quadratic equation of the form $x^2 + bx + c$ by factorising | Median of a set of data | Trigonometry to solve problems involving bearings | | | |
| Connections between graphs and quadratic equations | Mean from a grouped frequency table | Trigonometry to solve problems involving an angle of depression or an angle of elevation | | | |
| Solving quadratic equations using a | The range from a grouped frequency | Theme 9: Transformations & | | | |
| graph | table | Graphs | | | |
| Finding roots of quadratic functions graphically | Appropriate graphs or charts to represent data | Equation of a line through one point with a given gradient | | | |
| Interpreting intercepts of quadratic functions graphically | Frequency polygons | Graphs of quadratic functions | | | |
| Identify and interpret turning points of quadratic functions graphically | Scatter diagrams and correlation | Graphs of cubic functions | | | |
| Visual representations connected to the expanding of two binomials | Lines of best fit on a scatter diagram and use the line of best fit to estimate values | Graphs of reciprocal functions | | | |
| Factorise a quadratic into two linear expressions | Correlation and causation | Graphs of non-standard functions in real contexts | | | |
| Find roots of quadratic functions algebraically | | Transformations on a 2D shape | | | |
| Change the subject of a formula | | Enlargements by fractional scale factor with the centre of enlargement | | | |
| Solve simultaneous equations | | Vectors | | | |
| Algebraic proof | | Notations for vectors, including diagrammatic representation | | | |
| Theme 5: Ratio & | | Add and subtract vectors | | | |
| Proportion | | | | | |
| Revision of previous content | | Multiply a vector by a scalar | | | |
| Direct & inverse proportion inc. graphs, problems, finding the multiplier and using equations | | Geometrical problems involving vectors | | | |