

## Year 10 – Higher

### Learning Landmark (LL) assessments:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
LL1: Baseline Test reviewing previous year's content	LL2: Theme 1,2,3&4: Number, Shape & Angles, FDP, Algebra.	LL3: Theme 5&6: Ratio & Proportion and Sequences	LL4: Modified Higher GCSE Exam Paper	LL5: Full Higher GCSE Exam Paper	LL6: Full Higher GCSE Exam Paper

### Content Covered:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Theme 1: Number and Calculation</b>	<b>Theme 4: Algebra</b>	<b>Theme 5: Ratio &amp; Proportion</b>	<b>Theme 7: Data &amp; Probability</b>	<b>Theme 8: Geometry</b>	<b>Theme 9: Transformations &amp; Graphs</b>
Revision of previous year's content	Revision of previous year's content	Graphs that illustrate direct proportion	Use the product rule for counting	Surface area of spheres, cones and pyramids	Equation of a line through one point
Estimating squares and cubes of numbers up to 100	Multiplying two linear expressions $(ax + b)(cx + d)$ and $(x + a)^2$	Graphs that illustrate inverse proportion	Two-way tables and probabilities	Identify how to find the surface area of a composite solid	The equation of a line through two given points
Estimating powers of numbers up to 10	Factorising a quadratic expression	Equations that describe direct proportion	Venn diagram and probabilities	Practical problems involving the surface area of solids	Using the form $y = mx + c$ to identify parallel lines
Estimating square/cube roots	Solve a quadratic equation by factorising	Equations that describe inverse proportion	Conditional probabilities	Proof in a geometrical situation	Perpendicular lines and gradients
Minimum and maximum values of an amount that has been rounded	Rearrange quadratics in order to factorise or solve	Finding the multiplier in a situation involving direct & inverse proportion	Sampling	Volume of spheres, cones and pyramids	Perpendicular lines using algebraic methods
Calculations involving Minimum and maximum values	Graphs of quadratic functions	Converting fluently between metric units of volume / capacity	Combining means	Volume of a composite solid	Roots, intercepts and turning points of quadratic functions (graphically)
Combining fractional and negative index laws	Estimate solutions to quadratics using a graph	Combining compound measures	The modal class of grouped data	Problems involving the volume of solids	The equation of a circle from its graph
Manipulating surds i.e. $\sqrt{a \times b}$ is $\sqrt{a} \times \sqrt{b}$	Expanding the product of three binomials	<b>Theme 6: Sequences</b>	The class containing the median of a set of data	Enlargement and volume	Equation of a circle to draw its graph & find the equation of a tangent
Surds – simplifying and calculating	Change the subject of a formula	The $n$ th term of a sequence of the form $ax^2 + b$	The mean from a grouped frequency table	Enlargement and area	Algebraic problems involving tangents to a circle

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Theme 2: Shapes &amp; Angles</b>	Solving two linear simultaneous equations	The nth term of a sequence of the form $ax^2 + bx + c$	The range from a grouped frequency table	Scale factors for length, area and volume	Graphs of non-standard functions in real contexts
Revision of previous year's content	Solving simultaneous equations where one is quadratic	Describing simple geometric progression	Lower quartile and upper quartile	Length, area & volume problems	Graphs of quadratic, cubic and reciprocal functions
Loci problems and how to construct the locus of points a fixed distance from a point or line	Simultaneous equations & graphs	Finding terms in a geometric progression	Quartiles for discrete data sets	The ratio of corresponding sides in similar triangles is constant	Graphs of non-standard functions to solve simple kinematic problems
Constructing 2D shapes; e.g. rhombus, hexagon	The substitution or elimination method		Interquartile range	Using trigonometric ratios in a given situation	The gradient of a curve is not constant
Conditions for triangles to be congruent and proofs	Relate simultaneous equations to real life context		Box plot for discrete data	Sine, cosine and tangent as functions of an angle	Gradient of a curve and tangent
Working with similar shapes	Simplification of algebraic fractions		Box plots to compare distributions	Establishing the exact values of $\sin\theta$ and $\cos\theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ, 60^\circ$ and $90^\circ$	Gradient at a point on a curve as the instantaneous rate of change
<b>Theme 3: Fractions, Decimals &amp; Percentages</b>			Cumulative frequency	Establishing the exact value of $\tan\theta$ for $\theta = 0^\circ, 30^\circ, 45^\circ$ and $60^\circ$	Gradient of a chord as an average rate of change
Revision of previous year's content			Cumulative frequency table and curves	Sine, cosine and tangent of an angle	Gradients of graphs in context
Converting a recurring decimal to a fraction and vice versa			Graphs and charts to represent data	Trigonometric equations to find missing sides/angles in right-angled triangles	The area under a graph, including a speed-time graph as distance
Repeated percentage change, including compound interest			Frequency polygons	Trigonometry problems involving bearings and an angle of depression/elevation	Problems involving the area under graphs in context
Problems involving growth and decay			Scatter diagram including correlation and causation	Pythagoras' theorem in pyramids/cones	Transformations on a 2D shape
Original value problems			Line of best fit on a scatter diagram & estimate value		Enlargements
Percentage change					Vectors