Year 9 – 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: Numb. & Calc. Shape & Angle.	LL3: Theme 3&4: FDP and Algebra	LL4: Theme 5&6: Ratio & Proportion and Sequences	LL5: Theme 7&8: Data & Probability and Geometry	LL6: Theme 9: Transformations & Graphs

Content Covered:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Theme 1: Number and Calculation	Angles in polygons	**Theme 4: Algebra**	**Theme 5: Ratio & Proportion**	**Theme 7: Data & Probability**	**Theme 9: Transformations & Graphs**
Add, subtract, multiply and divide numbers written in standard form	Geometrical problems using bearings	Revision of all previous work on Algebra	Complex ratio problems involving mixing or concentrations	The multiplication and addition laws of probability	Plotting graphs of functions of the form ax ± by = c
Add, subtract, multiply, and divide decimals and negatives	Scale factor problems involving similarity	Multiplying two linear expressions (ax + b)(cx + d) and $(x + a)^2$	Problems combining fractions and ratio	Tree diagrams	Intercepts of linear functions algebraically
Prime factorisations to find the HCF and LCM of two numbers	Solving and proving shape problems	Factorising a quadratic expression	Direct and inverse proportion	Tree diagrams with independent and dependent combined events	Rearranging equations into the format y=mx+c to identify gradient and y intercept
Problems using HCF and LCM	**Theme 3: Fractions, Decimals & Percentages**	Factorising an expression involving the difference of two & perfect squares	The features of graphs that represent a direct or inverse proportion situation	Relative frequency and sample size	The gradient of a straight line and its y-intercept- investigate gradients
Evaluating numerical expressions involving powers, roots, negatives and fractions	Revision of previous work on fractions	Solve a quadratic equation of the form $x^2 + bx + c = 0$ by factorising.	Problems involving inverse proportion	Venn diagrams	The gradient of a straight-line graph as a rate of change
Rounding numbers to a given number of significant figures	Adding and subtracting mixed numbers and decimals	Solving a quadratic equation by rearranging and factorising	Problems involving rates of pay and unit pricing	Set notation and link to area of Venn diagram	Kinematic problems involving distance, speed and acceleration
The difference between truncating and rounding	Dividing a mixed number by a proper fraction/mixed number	Graphs and quadratic equations	Converting metric units of area and volume	The mean of a set of data And working backwards to find a missing piece of data	Solutions to simultaneous equations using graphs

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Minimum and maximum values of an amount that has been rounded	Multiplying mixed numbers by proper fractions/mixed numbers	Expanding the product of three binomials	Calculating density, mass & volume and pressure, area & force	The range as a measure of spread (or consistency)	Rotations, reflections and translations
Inequalities to describe the range of values for a rounded value (error interval)	Exact calculations with fractions	Changing the subject of a formula	Convert between units of speed	Analysis of data and the limitations of different statistics (mean, median, mode, range)	Constructing and describing enlargements by positive integer with centre of enlargement
Minimum and maximum values when solving a problem involving upper and lower bounds	Decimal multipliers	Two linear simultaneous equations	Combining compound measures (eg, two separate scenarios to find the overall distance)	Grouped frequency table for continuous data	
The zero index	Increasing an amount by a percentage greater than 100%	Simultaneous equations	Use bearings with map scale	Pie charts and know their use	
$a^{1/n} = \sqrt[n]{a}$	Financial problems inc simple interest	Simultaneous equations and graphs	**Theme 6: Sequences**	**Theme 8: Geometry**	
Simplifying expressions using the law of indices for negative powers	Calculating a percentage change	Two linear simultaneous equations in two variables in real life context	Find the nth term of increasingly difficult linear sequences	Circle definitions and properties including, tangent, chord, arc, sector and segment	
Theme 2: Shapes & Angles		Problems involving linear and quadratic simultaneous equations	Use the nth term of a sequence to decide if a number is in a sequence	Arc length of a sector	
Constructing the perpendicular bisector of a line segment		Simplification of algebraic fractions	Recognise and use the Fibonacci sequence. Generating Fibonacci type sequences	Area and angles of a sector	
Construct the angle bisector			Problems involving Fibonacci type sequences	Surface area of a right prism and cylinder	
Constructing a perpendicular to a line from a point and at a point			Growing patterns and other problems involving quadratic sequences	Lengths, areas and volumes using ratio notation	
Plans and elevations			Generating terms of a quadratic sequence from a written rule & its nth term	Finding missing sides of a right-angled triangle using Pythagoras' theorem	
Corresponding, alternate, opposite and co-interior angles			Finding the nth term of a quadratic sequence	Know a Pythagorean triple	