Year 8 – 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: Number & Calculation	LL3: Theme 2: Shape & Angle	LL4: Theme 3&4: FDP and Algebra	LL5: Theme 5&6: Ratio & Proportion and Sequences	LL6: Theme 7&8: Data & Probability and Geometry

Content Covered:

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Theme 1: Number and Calculation	**Theme 2: Shapes & Angles**	**Theme 4: Algebra**	**Theme 5: Ratio & Proportion**	**Theme 6: Sequences**	**Theme 8: Geometry**
Using the signs <, > and = to compare numbers	Constructing triangles, and other shapes, from written descriptions (ASA and SAS)	Reading and writing algebraic statements including inequalities	Problems involving division in a ratio with two or more parts	nth term to generate a sequence or given term in the sequence	Circle definitions and properties, inc centre, radius, diameter, circumference
Compound inequalities to compare three or more numbers (e.g. -1<0.5<4)	Constructing triangles when all three sides known (SSS)	Simplifying expressions	Simple ratio problems involving comparison	Finding the nth term of an ascending linear sequence	Circumference of a circle when radius or diameter is given
Standard form	Faces, edges & vertices in 3D shapes (Euler's formula)	Manipulating expressions and the distributive law	Simple ratio problems involving mixing or concentrations	Finding the nth term of a descending linear sequence	Perimeter of composite shapes that include half and quarter circles
Multiplying and dividing decimals	Use isometric paper to draw 3D shapes	Expanding two sets of single brackets	Using proportion in problems involving recipes	**Theme 7: Data & Probability**	Area of a circle when radius or diameter are given
Transforming calculations involving decimals	Interpret and draw plans and elevations	Factorising an algebraic expression by taking out common factors	Finding a relevant multiplier in a situation involving proportion	Listing outcomes of an event systematically	Area of composite shapes that include half and quarter circles
The order of operations, including powers and roots. (BIDMAS)	Problems using vertically opposite angles, angles at a point, angles on a line	Solving linear equations (one step, two step and an introduction to three step)	Solving problems involving unit pricing	Sample space diagrams	Volume of a right prism
Calculating with negative numbers	Missing angle problems involving triangles and quadrilaterals	Solve linear equations involving brackets	Convert fluently between metric units of length, mass and volume/capacity	Calculating probabilities using a sample space	Volume of a cylinder
Calculating powers (square, cube etc.) and roots	Solve missing angle problems (alternate, opposite, corresponding and co-interior)	Solving equations when the solution is an integer or a fraction	Direct proportion in a situation	Theoretical probability to calculate expected outcomes	

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Square and cube negative numbers	Corresponding, alternate, opposite & co-interior angles	Solving simple linear inequalities in one variable	Calculating with speed, distance and time	Experimental probability to calculate expected outcomes	**Theme 9: Transformations & Graphs**
Common factors and Highest Common Factor	Bearings	Representing inequalities on a number line	Estimating with scale drawings	Frequency trees to record outcomes of probability experiments	Given a function, establish outputs from given inputs and plot a graph
Common multiples and Lowest Common Multiple (LCM)	Corresponding sides of 2D shapes (different orientations)	Knowing the meaning of expression, term, formula, equation, identity function	Scaling in diagrams (maps/product design)	Line charts	Element of graphs with functions of the form y = mx ± c
Problems involving HCF & LCM	Solve basic scale factor problems involving similar shapes	Changing the subject of a formula (one/two steps)		Plot and interpret scatter diagrams of bivariate data	Gradient of a straight line on a unit grid
Numbers as a product of its prime factors in index form	**Theme 3: Fractions, Decimals & Percentages**			Scatter diagrams, correlation and causation	Plotting graphs of quadratic functions
Calculating with negative numbers and positive/negative fractions	Writing a quantity as a fraction of another where the fraction is greater than 1				Distinguishing between linear and quadratic graph
Round numbers to a given number of significant figures	Determine whether fractions are terminating or recurring				Graphs of piece-wise linear functions in real contexts
Using significant figures to estimate calculations	Writing a terminating decimal as a fraction				Distance-time graphs (speed-time graphs) and kinematic problems
Simplifying expressions using index laws	Ordering integers, decimals, fractions and mixed numbers				Vectors (understanding movement)
	Adding/subtracting fractions				Rotations, reflections, and translations
	Adding/subtracting mixed numbers				Enlargements
	Multiplying/dividing fractions				
	Percentage of an amount				
	Decimal multipliers for percentage increase/decrease				
	Increasing and decreasing an amount by a percentage				
	Percentage change				