Year 11 Maths Curriculum Map

Overview	The GCSE course is completed in Year 11, followed by time assigned to review, reflect, revise and strengthen. The higher and foundation tier schemes of work are continued below – knowledge required only on the higher tier are emboldened. Foundation learners also continue exploring topics from Year 10.	
Year 11	Autumn 1 & 2	Spring 1 & 2
Topic	Unit 17: More algebra Unit 18: Vectors Unit 19: Proportion & graphs	Revision and exam preparation
Assessment	Mock week 1 – Pupils complete two papers in exam conditions, one with a calculator and one without. These papers cover the entire GCSE syllabus.	Mock week 2 – In their final practice before their final exams, pupils complete two papers in exam conditions, one with a calculator and one without. These papers cover the entire GCSE syllabus.
Knowledge	Our learners can: Change the subject of a formula where the power of the subject appears. Change the subject of a formula where the subject appears twice. **Add and subtract, multiply and divide algebraic fractions.** Change the subject of a formula involving fractions where all the variables are in the denominators. **Simplify algebraic fractions.** **Simplify and expand expressions involving surds.** **Rationalise the denominator of a fraction.** **Solve equations that involve algebraic fractions.** **Use function notation.** **Find composite functions.** **Find inverse functions.** **Prove a result using algebra.** Understand and use vector notation. **Work out the magnitude of a vector.** Calculate using vectors and represent the solutions graphically. Calculate the resultant of two vectors.	Our learners can: **function form.**

	Solve problems using vectors. **Prove lines are parallel.** **Prove points are collinear.** Write and **use equations** to solve problems involving direct proportion. Solve problems involving square and cubic proportionality. Write and **use equations** to solve problems involving inverse proportion. Use and recognise graphs showing inverse proportion. **Recognise and sketch graphs of exponential functions.** **Calculate the gradient of a tangent at a point.** **Estimate the area under a non-linear graph.** **Understand the relationship between translating a graph and the change in its function notation.** **Understand the effect stretching a curve parallel to one of the axes has on its function form.** **Understand the effect reflecting a curve in one of the axes has on its**	
Skills	Students will combine their acquired subject knowledge, problem solving capabilities and examination experience to enable them to prepare for the assessments ahead. They will continue to utilise SPARX Maths for diagnostic purposes to assist revision.	