Subject: Mathematics		Year 11			
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
What are we studying? (Big idea/question(s))					
• Gradients and lines • Equations of perpendicular lines (H) • Non-linear graphs • Equation of a circle (H) • Using graphs • Area under a curve (H)	• Expanding and factorising • Solve quadratic equations (H) • Change the subject • Iteration (H) • Functions (H)	• Multiplicative reasoning • Direct & inverse proportion (H) • Geometric reasoning • Circle theorems (H) • Algebraic reasoning • Inequalities & proof (H)	• Transforming and constructing • Translations of graphs (H) • Listing and describing • Show that… • Congruency proofs • Revision	• Revision	
Why are we studying this? (skills, purpose or progression)					
To develop fluent knowledge, skills and understanding of mathematical methods and concepts.	To acquire, select and apply mathematical techniques to solve problems. To develop fluent knowledge, skills and understanding of mathematical methods and concepts.	To reason mathematically, make deductions and inferences, and draw conclusions.	To develop fluent knowledge, skills and understanding of mathematical methods and concepts.		
These mathematics skills include problem solving, building resilience and independent thinking. These are crucial skills for the work place and further education.					
How will this be assessed?					
We assess pupils regularly through the work produced in lessons. At the end of a block of teaching, pupils will complete a small assessment to check understanding. Pupils will complete a RAG analysis, highlighting strengths and areas that need more time. This will then feed into future lessons and what we set for homework. Pupils will complete 2 sets of trial exams (December and March) and complete practice exam papers at home (starting January) to aid with revising.					

RWCM	Reading the question carefully and underlining key words and important information. Deciphering a block of text to decide what mathematics to use.
Extra-curricular experiences	Intermediate Maths Challenge – a national competition run by the University of Leeds.
Careers Links	Financial careers (e.g. accountancy and banking), engineering, ICT roles, statistician, economist, …
Independent Learning	Sparx Maths will be set weekly on consolidation and areas that have been highlighted from our assessments. These will be completed online (www.sparxmaths.uk) and the students will make notes in their homework books. Exam papers will be set from January.
Essential Equipment	Basic school equipment (pen, pencil, ruler, eraser, green pen) and a **scientific calculator**.

EXCELLENCE • PURPOSE • AMBITION