Subject: Mathematics		Year 8			
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
What are we studying? (Big idea/question(s))					
• Ratio and scale • Multiplicative change • Similar shapes and scale diagrams • Map scales • Multiplying and dividing decimals	• Working in the cartesian plane • Drawing linear and non-linear graphs • Representing data • Frequency tables and two-way tables • Tables and probability	• Expand brackets • Factorise into a single bracket • Solve equations and inequalities • Sequences • Rules of indices	• Convert between fractions, decimals and percentages • Percentage increase and decrease • Standard index form • Metric conversions • Money	• Angles in parallel lines • Angles in polygons • Area of trapezia • Area of circles • Line symmetry and reflection	• Bar charts and pictograms • Pie charts • Averages and range • Averages from frequency tables • Compare distributions
Why are we studying this? (skills, purpose or progression)					
To be able to manipulate numbers. To be able to apply mathematics in different contexts and situations.	To develop fluent knowledge, skills and understanding of mathematical methods and concepts	To develop fluent knowledge, skills and understanding of mathematical methods and concepts	To be able to manipulate numbers. To be able to apply mathematics in different contexts and situations including financial links.	To comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.	To reason mathematically, make deductions and inferences, and draw conclusions.
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 a mid-year examination after the first term and an end-of-year examination during the Summer 2 half term.					

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	Junior Maths Challenge – a national competition run by the University of Leeds. 'Parallel' masterclasses.
Careers Links	Financial careers (eg. 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.
Essential Equipment	Basic school equipment (pen, pencil, ruler, eraser, green pen) and a **scientific calculator**.