Curriculum Map – Year 7 Mathematics

Learning Phase 1 – Autumn Term		
Knowledge	**Skills**	**Rationale**
ALL students cover: **NUMBER** ● Integers and Decimals ● Fractions and Decimals **ALGEBRA** ● Sequences and Functions ● Expressions **SHAPE** ● Area and Perimeter ● Angles ● Properties of Shapes **DATA** ● Representing and Interpreting Data **Excellence/Extending only:** **SHAPE** ● Surface Area and Volume of a cuboid **Excellence/Extending/Secure only:** **NUMBER** ● Percentages **ALGEBRA** ● Formulas **Developing only:** **SHAPE**	Through the mathematics content, pupils are taught to: Develop fluency: ● extend their understanding of the number system and place value ● select and use appropriate calculation strategies to solve increasingly complex problems ● use algebra to generalise the structure of arithmetic, including to formulate mathematical relationships ● substitute values in expressions ● develop algebraic fluency ● substitute values in expressions Reason mathematically: ● extend their understanding of the number system ● make and test conjectures about patterns and relationships ● explore what can and cannot be inferred in statistical settings Solve problems: ● develop their mathematical knowledge, in part through solving problems and evaluating the outcomes, including multi-step problems ● develop their use of formal mathematical knowledge to interpret and solve problems ● select appropriate concepts, methods and techniques to apply to unfamiliar and non-routine problems	The order in which topics are taught are influenced by the textbooks used (Oxford Maths Link 7A, 7B, 7C) although schemes have been written and adapted by experienced teaching staff to ensure challenge is provided across the attainment bands and to ensure students are prepared for on-going assessments. The order of topics are determined generally by the knowledge and skills which are pre-requisites for future topics. The content taught is determined by the National Curriculum.

• Coordinates and Lines		
Assessment 1 (Sept/Oct) Prior Knowledge Checkpoint Paper – this is a baseline assessment to see where pupils are currently and assess prior knowledge. 50mins. No Calculator		