Mathematics

Title/Name	Course Title/Exam Board/syllabus no.	Examination Board: AQA Specification: 4360
What will I learn?	• What will I gain from doing this course?	The study of maths provides an opportunity to structure arguments logically, to show flair and creativity in applying knowledge to problems and to develop the ability to analyse and interpret results. Success in Maths requires a disciplined approach to study. Being able to understand and use numbers and mathematical concepts will be a valuable asset for many careers.
	• Aims/Objectives	This specification aims to prepare learners to function mathematically in the world, to make informed decisions about the use of technology and the management of money, and to provide a thorough grounding for further study in mathematics. The course aims to help learners develop confidence in, and a positive attitude towards, mathematics and to recognise the importance of mathematics in their own lives and to society.
	• What will I do?	During the two years, opportunities will be provided for students to • develop knowledge, skills and understanding of mathematical methods and concepts • acquire and use problem solving strategies • select and apply mathematical techniques and methods in mathematical, everyday and real world situations • reason mathematically, make deductions and inferences and draw conclusions • interpret and communicate mathematical information in a variety of forms appropriate to the information and context
How will I be assessed?	• Method of Assessment (exam, coursework etc)	The course is divided into three units. Current course Unit 1: Statistics and Number 1 hour written paper Calculator allowed Unit 2: Number and Algebra 1 hour 15 minutes written paper Calculator not allowed Unit 3: Geometry and Algebra 1 hour 30 minutes written paper Calculator allowed Each unit will assess learners on their ability to: • recall and use their knowledge of the prescribed content; • select and apply mathematical methods in a range of contexts; • interpret and analyse problems and generate strategies to solve them. It is also expected that learners will: • use correct and accurate mathematical notation and

		vocabulary;
		• organise their work clearly and draw clear diagrams;
		• use correct spelling, punctuation and grammar in any explanations; that they are asked to provide.
	• Course Content	**Unit 1: Statistics and Number** This unit assesses all the statistics and probability content of the specification. Additionally, some appropriate aspects of number will be tested. • Working with numbers and the number system • Fractions, Decimals and Percentages • Ratio and Proportion • The Language of Algebra • Sequences, Functions and Graphs • The Data Handling Cycle • Data Collection • Data presentation and analysis • Data Interpretation • Probability **Unit 2: Number and Algebra** This unit concentrates on those number topics which are better tested without a calculator and aspects of algebra where a calculator is not required. • Working with numbers and the number system • Fractions, Decimals and Percentages • Ratio and Proportion • The Language of Algebra • Expressions and Equations • Sequences, Functions and Graphs **Unit 3: Geometry and Algebra** This unit assesses all the geometry and measures content of the specification as well as areas of algebra where a calculator is required and the graphical methods in algebra. • Working with numbers and the number system • Fractions, Decimals and Percentages • Ratio and Proportion • The Language of Algebra • Expressions and Equations • Sequences, Functions and Graphs • Properties of angles and shapes • Geometrical reasoning and calculation • Measures and Construction • Mensuration • Vectors