Subject: Mathematics	KS3	KS4
Aims of the Curriculum:	In Mathematics we adopt a build on approach to allow students to use their prior knowledge to help them consolidate their skills to work toward fluency in the fundamentals and to gain new skills – explicitly showing the links from one to the other and from different areas in Mathematics. We begin with number to ensure students have a good grounding of the essentials before moving onto other areas such as shapes, sequences, positions, directions, statistics and algebra. All of these use number as a foundation from which further knowledge and connections develop, allowing student to think mathematically in different situations. Where possible we link to historical, cultural and real world examples to demonstrate the importance of Mathematics within the world.	At KS4 students continue to build on the knowledge gained in KS3 with constant repetition on knowledge to help them remember key facts and connections while allowing them to discover new facts and connections and be able to apply this to an increasing number of different situations and in preparation for examination at different levels at the end of KS4 and in KS5, such as GCSE, functional skills and Ascentis awards and certificates.
Skills and Attributes:	• Develop and build on essential mathematical skills including counting, place value, comparing, clear representations and problem solving • Find links between different areas of mathematics and patterns in different situations • Check answers for accuracy • Apply mathematical knowledge to real life situation such as using time and money • Show working out for calculations clearly – using formal methods where appropriate • To develop skills to be able to work independently, use different approaches to overcome difficulties and to persevere.	• Continue to build on previous knowledge in Mathematics and develop more problem solving techniques and work towards reasoning mathematically • Using patterns and links in Mathematics so enhance knowledge and apply in different ways • Checking the reasonableness of answers using comparing and reverse processes. • Use knowledge gained from classwork to use everyday situations as well as during examinations • Know how to communicate effectively through clear presentation of calculations, data and situations • To continue to develop skills to be able to work more independently, use many different approaches to overcome difficulties and know to persevere when the first attempt does not give the correct answer.

Meeting our Students' Needs:	Securing skills in sequencing and pattern spotting is particularly relevant in meeting the needs of our cohort, many of whom experience rigidity of thought and difficulty in coping in different situations. The Mathematics curriculum allows them opportunities to find alternative routes to solutions and well as giving them the comfort of following given rules that can often lead to correct answers and a building of confidence. We look at how Mathematics can be used outside of the classroom to help with areas of everyday life such a time keeping, dealing with money, estimating, measuring and thinking logically. Wherever possible we use practical and concrete contexts to introduce topics before moving onto more abstract representations. We encourage students to discuss their thinking when answering mathematical problems in order to share different approaches and improve their communication with their peers as well as their ability to work with them. We hope to foster a sense of order within the world through the use of numbers to help them make sense of a seemingly random life and to make them inquisitive about the patterns of things around them and how they can interpret them in different ways. To ensure we meet our students' needs and help reduce anxiety we offer different pathways for students leading to different qualifications at the end of KS4 and 5