	Autumn Term 1	Autumn Term 2	String Term 1	String Term 2	Summer Term 1	Summer Term 2
Year 9	**Binary and Logic Gates**	**Networking and the internet**	**Programming in Python: Iteration**	**The ethics of computing**	**Sound editing**	**Project (end-of-KS3 assessment): Select two projects**
	• Logic gates • Introducing binary • Creating an app • Testing and reviewing an app • Representing text • Representing images	• IP addressing and switches • Domain names and DNS • Packets and packet switching • The internet • Connecting to the internet • A community guide to the internet	• Repeating instructions • User-defined for loops • For loops and strings • For loops and lists • Searching using for loops • While loops	• Sourcing content responsibly • Using technology responsibly • Technology and the environment • Technology and the law • Moral dilemma (part 1) • Moral dilemma (part 2)	• Audio effect • Planning a video advert • Creating sound-track for a video advert • Introduction to video advert • Visual effects	• Choose two out of three projects • Create solutions for the chosen projects
Year 8	**Introduction to Spreadsheets modelling**	**Algorithms**	**Programming in Python: selection**	**Binary and computer logic**	**Internet safety, cyber security and encryption**	**Sound editing**
	• Functions using SUM, AVERAGE, MAX and MIN • Boolean operators and the IF and COUNT functions • Formatting, graphs and charts • Modelling • Theme park challenges	• Using computational thinking to solve problems • Pattern recognition • Using flow diagrams to solve computational problems • Cholera in Soho • Malaria in Kitanga	• Selection • Decisions based on calculations • If else • Comparing strings and numbers • Elif • Multiple elifs	• Logic gates • Introducing binary • Creating an app • Testing and reviewing an app • Representing text • Representing images	• Digital footprint • Passwords and phishing • Malware • Encryption • Automating encryption • Keeping yourself safe online	• Audio effect • Planning a video advert • Creating sound-track for a video advert • Introduction to video advert • Visual effects
Year 7	**Baseline assessment / Getting started**	**Introduction to Spreadsheets modelling**	**Python Programming – Getting started**	**Computing: past, present and future**	**Programming in Python: sequence**	**Computing components**
	• Baseline assessment • File management • Cloud computing • Internet and digital wellbeing • Vector graphics & Bitmap graphics • Impossible photographs	• Formulae, replication and referencing • Functions using SUM, AVERAGE, MAX and MIN • Boolean operators and the IF and COUNT functions • Formatting, graphs and charts • Modelling • Theme park challenges	• Giving simple sequential instructions • Using logical reasoning skills to decide the order of the instructions • Learn to use loops • Learn to use nested loops	• The history of word processing • Designing a leaflet • Moore's Law • The history of computing • Learning to present • The future of computing	• Computer programs • Getting data from the user • Data types • Placeholders and lists • Working with lists • Working with strings	• Computer hardware • Measuring computer performance • Computer peripherals • Storage devices/media • The Internet of Things