



	Year 9	
Term	Unit	Assessment
Autumn	<b>9.1 – Introduction to Python</b>  This is an introduction to Python, a powerful but easy-to-use high-level programming language. Although Python is an object-oriented language, at this level the object-oriented features of the language are barely in evidence and do not need to be discussed. The focus is on getting pupils to understand the process of developing programs, the importance of writing correct syntax, being able to formulate algorithms for simple programs and debugging their programs.	Final program with annotations and evaluation.
	<b>9.2 – Mobile App Development</b>  Today, there's an app for every possible need. With this unit students will go through the entire process of creating their own mobile app, using App Lab from code.org. Building on the programming concepts learners used in previous units, they will work in pairs to perform user research, design their app, write the code for it, before finally evaluating and publishing it for the world to use.	Final program with annotations and evaluation.

Spring	<b>9.3 – Computer Crime and Cyber Security</b>  This unit covers some of the legal safeguards regarding computer use, including overviews of the Computer Misuse Act, Data Protection Act and Copyright Law and their implications for computer use. Phishing scams and other email frauds, hacking, “data harvesting” and identity theft are discussed together with ways of protecting online identity and privacy. Health and Safety Law and environmental issues such as the safe disposal of old computers are also discussed.	Worksheets  End of unit online test
	<b>9.4 – Computational Thinking and Logic</b>  This unit introduces students to the world of computational thinking and logic. With the help of many unplugged activities, students get to understand the power of problem solving and the different methods that Computer Scientists use to tackle problems.	End of unit assessment
Summer	<b>9.5 – Database Development</b>  This unit covers essential theory of databases in order to prepare pupils for GCSEs in either Computing or ICT. Supporting the basic theory, this unit has a practical focus, covering the creation and use of a single-table database and/or a simple relational database involving two tables in a one- to-many relationship using MS Access.	End of unit assessment
	<b>9.6 – Networks</b>  This unit covers the basic principles and architecture of local and wide area networks. Pupils will learn that the World Wide Web is part of the Internet, and how web addresses are constructed and stored as IP addresses using DNS. Pupils will learn about data transmission and through an understanding of different network topologies and network hardware, they will plan the structure of a local area network. Client-server, peer-to-peer networks and the concept of cloud computing are all described. Ways of keeping data secure and simple encryption techniques are also covered.	End of unit assessment