ASHTON COMMUNITY SCIENCE COLLEGE: COMPUTING CURRICULUM

Year 9						
	Half term 1	**Half term 2**	**Half term 3**	**Half term 4**	**Half term 5**	**Half term 6**
Knowledge	Topic: ▪ Python Programming	Topic: ▪ Digital Graphics	Topic: ▪ Ethical, Legal, And Environmental Issues in Computing	Topic: ▪ Image & Sound Representation ▪ Advanced Python Programming	Topic: ▪ Advanced Python Programming ▪ System Software	Topic: ▪ Spreadsheet Modelling
Skills/ application of knowledge	▪ How do I make programs in python? ▪ Be able to create programs using selection & iteration. ▪ How can I make my programs more efficient? ▪ How can I make my programs robust?	▪ What is the purpose & what are the properties of digital graphics. ▪ Be able to plan a digital graphic ▪ Be able to create a digital graphic ▪ Be able to review a digital graphic	▪ What are some of the ethical, legal, and environmental issues that computers have on society	▪ How do computers represent images? ▪ How do computers represent sound? ▪ What is compression and what effect does it have on storage. ▪ Be able to use procedures and functions in python ▪ Be able to use file handling when creating programs in python	▪ Be able to use procedures and functions in python ▪ Be able to use file handling when creating programs in python ▪ What is software? ▪ What is an operating system? ▪ What is utility software?	▪ Be able to use a range of appropriate formulas to produce key findings ▪ Be able to produce professional looking spreadsheets that contain advanced features such as charts and graphs
Links to prior learning	• Year 7- Micro:bits, small basic • Year 8- computational thinking, python introduction	▪ All lessons in year 7 & 8 contain aspects of the topic in addition to those specifically named below ▪ Year 7- IT skills, under the hood of a computer ▪ Year 8- multimedia products	• Year 7- E-safety, video & Sound editing • Year 8 – multimedia products, system security	• Year 7- E-safety, Micro:bits, small basic • Year 8- computational thinking, python introduction	• Year 7- E-safety, Micro:bits, small basic, under the hood of a computer, types of storage	• Year 7 – IT skills • Year 8- multimedia products • Year 9- digital graphics
Assessment	• Theory test • Practical test	• Theory test • Creation of a digital graphic to meet a brief	• End of topic test • Programming skills	• End of topic test • Programming skills	• Theory test • practical • End of topic test	• Theory test • Creation of spreadsheets to meet a brief