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: ▪ Data representation	Topic: ▪ Digital graphics	Topic: ▪ Python programming	Topic: ▪ Python Programming ▪ Ethical, legal, cultural and environmental issues in computing	Topic: ▪ Memory and storage	Topic: ▪ Spreadsheet skills
Skills/ application of knowledge	▪ Converting binary, denary and hexadecimal numbers ▪ How do computers represent images? ▪ How do computers represent sound? ▪ What is compression and what effect does it have on storage.	▪ 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	▪ How do I make programs in python? ▪ What are data types and why do computers need them? ▪ How can I make my programs more efficient? ▪ How can I make my programs robust?	▪ How do I make programs in python? ▪ What are data types and why do computers need them? ▪ How can I make my programs more efficient? ▪ How can I make my programs robust? ▪ What are some of the ethical, legal, cultural and environmental issues that computer shave on society	▪ Why does a computer need memory? ▪ Why does a computer need different types of memory? ▪ Why are some of the different types of memory faster than others?	▪ 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- under the hood of a computer • Year 8- logic gates and truth tables	▪ 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- Micro:bits, small basic • Year 8- computational thinking, python introduction	• Year 7- E-safety, Micro:bits, small basic • Year 8- computational thinking, artificial intelligence, system software, python introduction	• Year 7- Under the hood of a computer, types of storage	• Year 7 – IT skills • Year 8- multimedia products • Year 9- digital graphics
Assessment	• Mid unit assessment • End of topic test	• Mid unit assessment • End of topic test • Creation of a digital graphic to meet a brief	• Mid unit assessment • End of topic test • Programming skills	• Mid unit assessment • End of topic test • Programming skilss	• Mid unit assessment • End of topic test	• Mid unit assessment • End of topic test • Creation of spreadsheets to meet a brief