Year 9 Computer Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Creating Digital Images	Python 2/Scratch	Cyber Security	Cyber Security	Functional Skills in ICT	Functional Skills in ICT
Assessment	Online MCQ. Work booklet with low level and extended written responses. Mixture of peer and teacher assessment.	Student work booklet that includes written questions. MCQ Coded solution to a set project	An online multiple choice test. A work booklet with a combination of low-level and extended written responses. Students encourage to assess and correct their own and each other's work.		An online multiple choice test. A work booklet with a combination of low-level and extended written responses. Students encourage to assess and correct their own and each other's work.	

Building on Prior Learning	• Building on from their prior learning in the Year 8 Computer Systems unit, learners will use their knowledge of binary to understand how this language is used to represent images on a screen. • Building on an introduction to Python, learners will continue to learn the three programming and algorithmic constructs. • Building on the e-safety unit of work, students will be taught the importance of cyber security and how they can keep themselves safe from on-line threats. • Building from the ICT skills in year 8, students are taught advanced functional skills to aid their transition in to KS4, developing key digital skills for business purposes specifically in Microsoft Office. In addition, understanding digital policies such as acceptable use and email etiquette that would be required in the work place.
Links with other subjects	• Computer Science and ICT are two discrete subjects. Therefore the links made are towards these two areas. In addition, the problem solving element of CS has strong links with mathematics, product design and engineering, whilst the creative element has strong links with art, and creative iMedia.
Extracurricular opportunities	• Cyber-Discovery – online student-led course for students that enjoy problem solving. • Computing Club – Run twice per half term for middle school students and KS3.
A successful learner in this	• Problem solving skills. • Abstraction, to be able to take out detail to solve a problem.

subject will demonstrate	• Resilience and critical thinking.
Impact on personal development	• To develop resilience in problem solving skills and to understand the digital world. How computers affect our daily lives, the impact of computer decision making in the world around them.

Ways to support student learning in this subject
• Encourage safe use of personal computer technology.   • Help students to understand the bigger picture with technology in the work place and being 'work-place' ready.   • Reinforce the need to understand how computers and algorithms work to encourage them to think beyond their passive use of their personal devices