Sackville School Computer Science Curriculum - Year 7

TERM	WHAT? (Is delivered?)	WHY? (Is this important?)	WHY NOW? (Why is this taught now?)	IMPACT? (What is the impact at the end of this half term?)	ASSESSMENT
Aut	Technology in our lives looking exploratively at the technology students use day to day	- Introduces students to effective online searching and questioning of information validity - Encourages the use of keyboards and mice to build dexterity and competence - Evaluates their proficiency with software skills commonly used - Understand the need for clear folder structures;	- It is vital that all students positioning is assessed upon entry to the school - Identifies cohort wide areas of weakness after progression from primary school - Understanding software selection is pivotal to the rest of their school life - Introduces students to genre conventions, preparing them for future KS3 units	Students will be able to: - Save their work in an appropriate place - Understand the key functions of the software they use regularly and use this to effectively select software for a given purpose - Develop an understanding of 'good' online searches and how to validate information online.	Baseline assessment on content from the Key Stage 2 National Curriculum. Knowledge Check on Technology - Functions and Features
Spr 1	System Threats and System Security	In an ever developing digital world and awareness of digital security and how prevention of attacks couldn't be more relevant. As shopping, education and banking move more online, building a skill set to spot and prevent attacks early on is vital.	- The world of cyber security is changing and with the NCCC stating that this will be the biggest sector for jobs by 2026. - Be able to advise about how to avoid cyber security threats and understand their implications. - Explain how to mitigate cyber security attacks	Students will be able to: - Understand the term 'system threats' - Can state the different types of threats in the teaching content - Can explain the threats and their impacts - Can explain the term social engineering and give examples - Can suggest prevention methods for more than three examples	Knowledge Check on System Threats and Cyber Security
Spr 2	Artificial Intelligence	With the rise of AI in the last five years this topic allows students to understand the different AI uses and models. Whilst also giving them the opportunity to understand what makes a good Internet search and AI search.	- Students are using AI more and need to do so safely and effectively - Students need to be able to understand how AI used for research and development can benefit their understanding - Engaging and practical exposure to internet searching.	Students will be able to: - Effectively search the internet - Use AI to research a topic - Discuss the different language models - Explain the different types of AI - Suggest ways AI can be used in the modern world.	Application Check - Cyber Security and AI
Sum	Block Based Programming - Scratch, Python in Pieces	Students have been introduced to coding and possibly scratch at primary school. However, with varying depths of knowledge, exposure, and inaccurate use of key terms many misconceptions may have formed. This unit creates a foundation for further coding/algorithmic based learning.	- Allows for assessment of prior attained knowledge - Scaffolds learners nicely from block based coding to textual syntax - Allows for mistakes and advises the user to build confidence and resilience	Students will be able to: - Understand the four strands of computational thinking - Understand that there are two forms of iteration - Understand how selection can create pathways through a program	Finished executable coded programs

Links to L4L Curriculum and Gatsby Benchmarks:

- L4L Online Safety
- 2 - Learning from career and labor market information
- 5 - Linking curriculum learning to careers
- 5 - Encounters with employers and employees
- 8 - Personal Guidance