CURRICULUM MAP : Transition yr9

Term Autumn 14 weeks	Transition Year 9	Term Spring 10 weeks	Transition Year 9	Term Summer 14 weeks	Transition Year 9
Literacy foci **Reading skills** **Terminology and vocabulary** **Keywords** **Spelling tests** **Homework** **Quizizz.com** **& spelling on SMHW** **Revisiting, revising, remembering opportunities** **Starter activities** **Quizizz.com** **Yacapaca** **SIMS Data drop**	**Units:** **9.1 Python Next Steps** **NC** Content: Students are able to understand several key algorithms that reflect computational thinking They will use logical reasoning to compare the utility of alternative algorithms for the same problem in a program Students will use a programming language, which is textual, (python), to solve a variety of computational problems, the will understand the appropriate use of data structures [for example, lists, tables or arrays]; design and develop programs that use procedures or functions. **9.2 Computational Thinking** **NC** Content: Students must understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; They will learn how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal] Students must understand what abstraction and decomposition are in relation to computational thinking **Enrichment/life and work skills:** **Computer Science Club** **Competitions** **Assessments:** **Yacapaca Quiz.** Endpoints: Students will understand how to program in Python, understand Boolean logia and key algorithms.	**Literacy foci** **Reading skills** **Terminology and vocabulary** **Keywords** **Spelling tests** **Homework** **Quizizz.com** **& spelling on SMHW** **Revisiting, revising, remembering opportunities** **Starter activities** **Quizizz.com** **Yacapaca** **SIMS Data drop**	**Units:** **9.3 Graphics** **NC** Content: Students will create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability. Students learn how to create a variety of graphic images using image editing applications, they understand the appropriate use of a variety of file formats **9.4 Networks** **NC** Content: Students revisit how to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; and ability to recognise inappropriate content, contact and conduct and know how to report concerns. They learn about the hardware and software components that make up computer systems, and how they communicate with one another and with other systems. The school network is used as a real life example. **Enrichment/life and work skills:** **Computer Science Club** **Competitions** **Assessments:** **Yacapaca Quiz.** Endpoints: Students will develop digital graphics skills and understand how networks operate and their own use of them.	**Literacy foci** **Reading skills** **Terminology and vocabulary** **Keywords** **Spelling tests** **Homework** **Quizizz.com** **& spelling on SMHW** **Revisiting, revising, remembering opportunities** **Starter activities** **Quizizz.com** **Yacapaca** **Revision for Summer exam** **SIMS Data drop**	**Units:** **9.5 Multimedia** **NC** Content: They will complete a creative project that involves them selecting, using, and combining multiple applications, across a range of devices, to achieve a challenging goal, They will collect and analyse data and meet the needs of known users or clients. They will create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability. They must create a Multimedia product which meets a specific brief. **9.6 Hardware/Software** **NC** Content: They will learn about the hardware and software components that make up computer systems, and how they communicate with one another and with other systems. They will recognise how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits, relating this back to the hardware. **Enrichment/life and work skills:** **Computer Science Club** **Competitions** **Assessments:** **End of Year Assessment.** Endpoints: Students will understand what a multimedia product is and how to create one, they will also understand the role of Hardware and Software in Computing and its relation to digital data.