Computer Science Related Topics	# Oakfield Academy Computing Curriculum Map Key Stage 3					ICT Related Topics

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7 Languages taught: Scratch HTML	**eSafety:** Learn about reliability of websites, viruses, online security and passwords **Hardware & Computer Systems:** Learn about the CPU and have the opportunity to take a computer apart. Understand that reference to memory means RAM (or ROM)	**Computational thinking and flowcharts.** Pupils are able to demonstrate their skills to think computationally and understand how to write in 'pseudocode'. #HourofCode	**Binary Numbers** **Python: An Introduction** Pupils are able to experience a new programming language in Python and how to use statements, variables and functions.	**Game Reviews & Construction:** Pupils are able to use online resources to review, play, deconstruct and create their own online platform games to see how they are pieced together to create the experiences.	**Web Design:** Pupils recognise how websites are put together and attempt to create their own pages using online HTML editors.	**Digital Literacy:** Formal letter writing Presentation tools using Power Point and Prezi to create interactive presentations.
Year 8 Python Java (#Challenge)	**eSafety:** Cyberbullying and grooming/ Use of social media **Storage Superheroes:** To identify how storage can vary for data and to begin to recognise the significance of cloud based storage. (Introduction to Google Drive)	**Python: Numbers & Drawing** Pupils are able to expand on their previous learning of Python to apply it to solving problems. #HourofCode	**Sorting and Searching Algorithims** **Boolean Logic, logic gates & Truth Tables**	**Sketchup** Pupils are able to use and experience 3D design and development software. **Introduction to Pseudocode**	**HTML/CSS** Pupils use HTML code to construct a website from scratch. They draw on their year 7 work of using online editors to compare and contrast their work.	**Oakfield Alphabet: Photography Project** Pupils complete a photography project and then use software to digitally alter and manipulate images for specific focuses.