

ACLE ACADEMY KS3 LEARNING JOURNEY: Computer Science 2023-2024

Computer Science is in the Creative Industries Rotation in Year 7 and Year 8

In Year 9 students have one lesson per fortnight

SUBJECT:	Section one of Year 7 rotation:	Section two of Year 7 rotation:	Section three of Year 7 rotation:
Year 7- programme of study:	The basics!	Coding (Scratch)	Networks and Hardware
Progression of knowledge and skills:	X4 lessons on: Digital literacy. Presentations, Spreadsheets, Databases, ESafety, Quiz assessment.	X10 lessons on: Introduction to coding and algorithms. Developing coding skills, knowledge and vocabulary. Oracy presentation assessment. Quiz assessment.	X7 lessons on: Computer networks and protocols, networking hardware, wired and wireless networks, the internet, Internet services, the World Wide Web. Quiz assessment.
Year 8- programme of study:	Python	Online Awareness	Computer systems
Progression of Knowledge and Skills:	X7 lessons on: Introduction to Python and text based coding, calculations in Python, developing knowledge and understanding and making a maths game using Python. Quiz assessment.	X10 lessons on: Intro to being safe onlne, your online reputation, Big data, right to privacy, data protection, fake news, illegal content, right to access, the bubble, Oracy assessment.	X8 lessons on: Understanding the hardware behind a computer, how operating systems work, the history of computers, research and oracy lesson, quiz assessment.
	Autumn Term	Spring Term	Summer Term
Year 9- programme of study	Further Python*	Representations (from clay to silicone)	Cybersecurity
Progression of knowledge and skills	*As Python unit in year 8 for 2023 – 2024. Next year we will add in higher level skills and using python with microbits	X7 Lessons on: The history of writing and codes, binary digits, Bits and bytes!, project lesson, project lesson. Quiz assessment.	X8 lessons on: You and your data, social engineering, script kiddies, rise of the bots, networks, project lesson, careers lesson, quiz assessment.