



Year 9 Computer Science– Spring Term 1 – KNOWLEDGE OVERVIEW

Subject: Computer Science				
Year group: 9		Unit: Ethics in computing	Date (from and to): 4 January 2021 – 26 February 2021	
Wk.	Big question / concept: What are the ethical issues relating to technology	Learning intentions: Learners must be able to:	Resources	
			Offline:	Online including links on how to access these: -
1	What are the various types of legislation in computing <ul style="list-style-type: none"> • Computer Misuse Act (1990) • Freedom of Information Act (2000) • Communications Act (2003) • Data Protection Act (1998) • Copyright, Designs and Patents Act, CPDA (1988) • Creative Commons (CC) 	<ul style="list-style-type: none"> • Student can explain the following • Computer Misuse Act (1990) • Identify the definition • Find examples of where the act has been used with a positive and negative consequence • 	<ul style="list-style-type: none"> • Computer science booklet page 4 - 19 	GCSE POD videos – Access through the following link. School login required. https://members.gcsepod.com/shared/podcasts/title/13842/83817 https://www.bbc.co.uk/bitesize/guides/zhx26yc/revision/1 https://www.bbc.co.uk/bitesize/guides/zhx26yc/revision/1 Page 5 - 10 https://www.youtube.com/watch?v=cJZlnORzWys&list=PLCiOXwirraUCHoD2tVSJ6ZmnHUayVr3WT Legal issues https://www.youtube.com/watch?v=N1QUHzTs-cs&list=PLCiOXwirraUCHoD2tVSJ6ZmnHUayVr3WT&index=3 Privacy issues https://www.youtube.com/watch?v=A_6NfRS3nt0&list=PLCiOXwirraUCHoD2tVSJ6ZmnHUayVr3WT&index=2
2	<ul style="list-style-type: none"> • Open Source and Proprietary software • Quiz 	<ul style="list-style-type: none"> • Students know the difference between the 2 types of software. Students know when to use these. Quiz on legal issues	Page 19 - 21	https://www.bbc.co.uk/bitesize/guides/zhx26yc/revision/1 Page 11 Open source vs proprietary https://www.youtube.com/watch?v=f2NkKTn-mw8&list=PLCiOXwirraUCHoD2tVSJ6ZmnHUayVr3WT&index=7 Open source explained in lego https://www.youtube.com/watch?v=a8fHgx9mE5U

3	<ul style="list-style-type: none"> Ethical and cultural issues Privacy Work issues Censorship Automation 	<ul style="list-style-type: none"> Students can explain how each of the following impact daily life and find examples of where each of the listed have been used in positive and negative manners. 	Page 22 – 28	https://www.bbc.co.uk/bitesize/guides/zhx26yc/revision/1 - Page 3 https://www.youtube.com/watch?v=ixloDYVfKA0 Automation of cars ethical issue Rise of machines video https://www.youtube.com/watch?v=WSKi8HfcxEk Cultural implications https://www.youtube.com/watch?v=SlvGvZ1ZoNQ Cultural implications https://www.youtube.com/watch?v=SlvGvZ1ZoNQ&list=PLCiOXwirraUCHoD2tVSJ6ZmnHUayVr3WT&index=4 Stakeholders https://www.youtube.com/watch?v=d4OJ7FUHD8Q&list=PLCiOXwirraUCHoD2tVSJ6ZmnHUayVr3WT&index=6
4	Artificial intelligence	<ul style="list-style-type: none"> Students can explain what artificial intelligence is. Students know how AI is used. 	29 – 31	Artificial intelligence https://www.youtube.com/watch?v=mJeNghZxtMo https://www.youtube.com/watch?v=ad79nYk2keg AI Explained How machines learn https://www.youtube.com/watch?v=R9OHn5ZF4Uo AI - https://www.youtube.com/watch?v=z-EtmaFJieY
5	Environmental issues	Environmental issues impacting technology	Page 32 - 33	https://www.bbc.co.uk/bitesize/guides/zhx26yc/revision/1 Page 4 Environmental issues https://www.youtube.com/watch?v=v5_urd3UbWA&list=PLCiOXwirraUCHoD2tVSJ6ZmnHUayVr3WT&index=5
6	<ul style="list-style-type: none"> Contingency 			