



Year 7 Computer Science – Summer Term 1 – KNOWLEDGE OVERVIEW

Subject: Computing				
Year group: 7 & 8		Unit: Networks		Date (from and to): 12 th April – 28 th May 2021
Wk.	Big question / concept: What is a Network?	Learning intentions: Learners must be able to:	Resources	
			Offline:	Online including links on how to access these:
1	Computer networks and protocols	<ul style="list-style-type: none"> • Define what a computer network is and explain how data is transmitted between computers across networks • Define 'protocol' and provide examples of non-networking protocols • 	<ul style="list-style-type: none"> • Work pack for lesson can be made available upon request. 	Lesson slides with activities on MS Teams. Log on to teams and check work. Join live lesson where possible.
2	Networking hardware	<ul style="list-style-type: none"> • List examples of the hardware necessary for connecting devices to networks 	Work pack for lesson can be made available upon request.	Lesson slides with activities on MS Teams. Log on to teams and check work. Join live lesson where possible.
3	Wired and wireless networks	<ul style="list-style-type: none"> • Compare wired to wireless connections and list examples of specific technologies currently used to implement such connections • Define 'bandwidth', using the appropriate units for measuring the rate at which data is transmitted, and discuss familiar examples where bandwidth is important 	Work pack for lesson can be made available upon request.	Lesson slides with activities on MS Teams. Log on to teams and check work. Join live lesson where possible.
4	The internet	<ul style="list-style-type: none"> • Define what the internet is • Explain how data travels between computers across the internet • Describe key words such as 'protocols', 'packets', and 'addressing' 	Work pack for lesson can be made available upon request.	Lesson slides with activities on MS Teams. Log on to teams and check work. Join live lesson where possible.

5	Internet services	<ul style="list-style-type: none"> ● Explain the difference between the internet, its services, and the World Wide Web ● Describe how services are provided over the internet ● List some of these services and the context in which they are used ● Explain the term 'connectivity' as the capacity for connected devices ('Internet of Things') to collect and share information about me with or without my knowledge (including microphones, cameras, and geolocation) ● Describe how internet-connected devices can affect me 	Work pack for lesson can be made available upon request.	Lesson slides with activities on MS Teams. Log on to teams and check work. Join live lesson where possible.
6	The World Wide Web	Describe components (servers, browsers, pages, HTTP and HTTPS protocols, etc.) and how they work together	Work pack for lesson can be made available upon request.	Lesson slides with activities on MS Teams. Log on to teams and check work. Join live lesson where possible.
7	End of topic assessment / contingency		Work pack for lesson can be made available upon request.	Lesson slides with activities on MS Teams. Log on to teams and check work. Join live lesson where possible.