High Tunstall College of Science Curriculum Intent

Topic:	Communication and the Internet		Year:	11	Half Term:	1

		Progress		
Key Ideas		**R**	**A**	**G**
Explain why computers are connected in a network				
Describe the different types of networks and usage models				
Describe the characteristics of network topologies				
Describe wired and wireless connectivity				
Explain that network data speeds are measured in bits per second				
Describe the role and need for network protocols				
Explain that data can be transmitted in packets using layered protocol stacks				

Lesson	Learning Focus	Assessment	Key words
1	Computer Networks and their use Different types of networks	OneNote work Socrative	Communication, Computers, Data, Network, Resources, Services, Sharing Local Area Network (LAN), Wide Area Network (WAN), Wireless Local Area Network (WLAN)
2 and 3	Wired and Wireless Connectivity	OneNote work Socrative	Client-Server, Communication media, Computers, Data, Eavesdrop, Local Area Network (LAN), Network, Peer-to-Peer, Protocol, Resources, Services, Sharing, Topology, Wide Area Network (WAN),Wired, Wireless, Wireless Local Area Network (WLAN)
4	Network Data Speeds	OneNote work Socrative	Bandwidth, Transmit bits per second (bps) kilobits per second (kbps) megabits per second (mbps) gigabits per second (gbps)
5	Introduction to Protocols	OneNote Socrative	Checksum, IMAP, Layer, Packet, POP3, SMTP, Web server, Application Layer Transport Layer Internet Layer Link Layer
6	Protocols	OneNote work Socrative	Checksum, IMAP, Layer, Packet, POP3, SMTP, Web

			server,
			Application Layer Transport Layer Internet Layer Link Layer
7	Layered protocol stacks (TCP/IP) and packets	OneNote work Socrative	Checksum, IMAP, Layer, Packet, POP3, SMTP, Web server, Application Layer Transport Layer Internet Layer Link Layer
8	Network Topologies	OneNote work Socrative	Computer, Network, Printer, Server, Topologies Bus Mesh Ring Star
9	End of topic Assessment	Examination questions	All of the above