MAGHULL HIGH SCHOOL – CURRICULUM MAP

HALF TERM 1.2 Nov - Dec	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
TOPIC (S)	**How do computers communicate**	**How is a physical network built**	**How do wired and wireless networks differ**	**What is the Internet**	What is the WWW	**Review of lessons taught**
Knowledge & Skills development	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	Explores the functionality of key hardware components found in a network	Compare wired to wireless connections Define 'bandwidth', using the appropriate units for measuring the rate at which data is transmitted	Define what the internet is Explain how data travels between computers across the internet Describe key words such as 'protocols', 'packets', and 'addressing'	Describe components (servers, browsers, pages, HTTP and HTTPS protocols, etc.) and how they work together	Demonstration of skills learnt in the unit of study
Assessment / Feedback Opportunities	Classroom activity Class Discussion Questioning pupils Verbal Feedback					Written assessment
Cultural Capital	Different communication methods History and vastness of the Internet					
SMSC / Promoting British Values (Democracy, Liberty, Rule of Law, Tolerance & Respect)	- Listening to others - Understanding of technology to support additional needs - Responding suitable in discussions					
Reading opportunities	- Instructional reading - Key word identification - Computer Networking Beginners Guide - Windows Home Networking Made Easy - How Networks Work					
Key Vocabulary	Network, protocol, mainframe, personal computer, stand-alone, HTTP, Network cable, hub, server, router, ISP, Wired, wireless, 3G, 4G, 5G, WiFi, bandwidth, bit, megabit, gigabit, broadband, buffering, Internet, packet, router, IP address, packet header, packet payload, Transmission Control Protocol, Internet Protocol, World Wide Web, web browser, web server, web page, search engine, HTTP, HTTPS, URL, domain name, domain name system					
Digital Literacy	Use of technology					

	Digital research methods Use of range of software
Careers	Network Engineer – Penetration tester – IT technical support officer – Cyber security analyst – Infrastructure manager