

Key Vocabulary for Spring Term Overviews

Subject: Computer Science		Year Group: Y10
Key Learning Points/End Points	Key Vocabulary	
Network protocols	<p>Encryption - the process of converting information or data into a code, especially to prevent unauthorized access.</p> <p>IP address - a unique string of characters that identifies each computer using the Internet Protocol to communicate over a network.</p> <p>MAC address - A media access control address (MAC address) is a unique identifier assigned to a network interface controller (NIC)</p> <p>Standards - Networking standards define the rules for data communications that are needed for interoperability of networking technologies and processes.</p> <p>Protocols - A network protocol is an established set of rules that determine how data is transmitted between different devices in the same network.</p> <p>TCP/IP (Transmission Control Protocol/Internet Protocol)</p> <p>HTTP (Hyper Text Transfer Protocol)</p> <p>HTTPS (Hyper Text Transfer Protocol Secure)</p> <p>FTP (File Transfer Protocol)</p> <p>POP (Post Office Protocol)</p> <p>IMAP (Internet Message Access Protocol)</p> <p>MTP (Simple Mail Transfer Protocol)</p> <p>Network layers - The network layer is a portion of online communications that allows for the connection and transfer of data packets between different devices or networks.</p>	
System security	<p>Malware - software that is specifically designed to disrupt, damage, or gain unauthorized access to a computer system.</p> <p>Phishing - the fraudulent practice of sending emails purporting to be from reputable companies in order to induce individuals to reveal personal information, such as passwords and credit card numbers.</p> <p>Social engineering - the act of exploiting human weaknesses to gain access to personal information and protected systems.</p> <p>Brute force attacks - A brute force attack uses trial-and-error to guess login info, encryption keys, or find a hidden web page.</p>	

Key Vocabulary for Spring Term Overviews

	<p>Denial of service attacks - an attack meant to shut down a machine or network, making it inaccessible to its intended users.</p> <p>SQL injection - SQL injection is a web security vulnerability that allows an attacker to interfere with the queries that an application makes to its database.</p> <p>Penetration testing - A penetration test, also known as a pen test, is a simulated cyber attack against your computer system to check for exploitable vulnerabilities.</p> <p>Firewalls - a firewall is a network security system that monitors and controls incoming and outgoing network traffic based on predetermined security rules.</p>
--	--