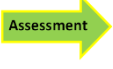
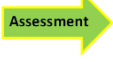




<p>In my GCSE Computer Science lessons this half term I am developing my knowledge of networks. I will also develop my python programming skills.</p> <p>Unit 1, Topic 3 Communication This half term: Skills, knowledge and Understanding to be developed:</p> <ul style="list-style-type: none"> - Skills (students will be able to create functions and pass parameters in and out of these functions. Students will also be able to read and write from files in Python.) - Knowledge (will know the different network topologies and the advantage and disadvantage of each one.) - Understanding (students will demonstrate their understanding by creating a program that will validate usernames and passwords from files) 		<p>Key Terms / Words: WAN, LAN, Ring, Bus, Star, Mesh, Topology, Packet, Collisions, HTTP, FTP, TCP/IP, SMTP, POP3.</p>	
<p>LP 3 – Week 1 Learning Outcomes: Computational thinking</p> <ul style="list-style-type: none"> • Students will know the advantages of networks and the difference between LAN and WAN networks. • Students will know the advantages and disadvantages of different network topologies. 		<p>Success Criteria:</p> <ol style="list-style-type: none"> 1. Students will be able to answer GCSE questions on network topologies. 	<p>Homework LP3 1</p> <p>Worksheet 1 – Network topologies revision.</p>
<p>LP 3 – Week 2 Learning Outcomes:</p> <ul style="list-style-type: none"> • Students will be able to write and read from files in Python. • Students know the advantages of wired and wireless networks. 	<p><u>APP</u></p>	<p>Success Criteria:</p> <ol style="list-style-type: none"> 1. Students complete a short APP on networks. 	<p>Homework LP3 2</p>
<p>LP 3 – Week 3 Learning Outcomes</p> <ul style="list-style-type: none"> • Students will know the advantages and disadvantages of packet and circuit switching. • Students will be able to describe routing. 		<p>Success Criteria:</p> <ol style="list-style-type: none"> 1. Students can discuss switching in detail. 	<p>Homework LP3 3</p>
<p>LP 3 – Week 4 Learning Outcomes</p> <ul style="list-style-type: none"> • Students will know the typical contents of a TCP/IP packet. • Students will know the TCP/IP 5-layer model and describe methods of routing traffic. • Students will be able to write files in a correct format with delimiters. 		<p>Success Criteria:</p> <ol style="list-style-type: none"> 1. Students can explain the layers involved in transferring a packet from one device to another. 	<p>Homework LP3 4</p>
<p>LP3 – Week 5 Learning Outcomes:</p> <ul style="list-style-type: none"> • Students will know the role of protocols and be able to describe some of the most common protocols. (TCP/IP, Ethernet) • Students be able to explain Domain Name Systems(DNS) servers and how Internet Protocol(IP) addresses work. 	<p><u>SA</u> Grade</p>	<p>Success Criteria: Students will complete their Mock examination</p> <ol style="list-style-type: none"> 1. Students can create a program that can validate a username and password from a file. 	<p>Homework LP3 5</p> <p>Revision sheet for their mock exam.</p>
<p>LP3 – Week 6 Learning Outcomes:</p> <ul style="list-style-type: none"> • Students will be able complete truth tables using multiple variables and AND, OR, NOT and XOR operations. • Students will understand that truth tables are needed to simplify circuitry. 		<p>Success Criteria:</p> <ol style="list-style-type: none"> 1. Students will be able to complete and create truth tables. 	<p>Homework LP3 6</p>