





# Year 10: ASK Yourself!

**Subject: Computer Science**

**Unit: Term 2**

	Launching 1-2	Developing 3-4	Progressing 5-6	Mastering 7-9
 <b>S</b> skills				
<b>Exam Questions Knowledge Type</b>	I can answer knowledge questions with support.	I can answer knowledge questions with some support.	I can answer knowledge based questions independently.	I can answer knowledge based questions confidently.
<b>Exam Questions Essay Type</b>	I can answer essay type questions when provided with a structure.	I need some support to structure my essay type answers.	I can structure my essay type answers independently.	I can produce well-structured essay type answers independently.
 <b>K</b> nowledge				
<b>Networks</b>	I can state the characteristics of a computer network.	I can describe the main types of computer networks.	I can describe the benefits of each type of computer network.	I can discuss the benefits and risks of computer networks.
<b>Media</b>	I know that networks can be wired or wireless.	I can choose an appropriate connection medium for given situation.	I can describe the benefits of wired and wireless networks.	I can discuss the benefits and risks of wired and wireless networks.
<b>Network Topologies</b>	I can draw a star and bus topology diagram.	I can state the characteristics of each topology.	I can explain the differences between the two topologies.	I can select the most appropriate topology for a given scenario and explain the differences.
<b>Network Protocols</b>	I can define the term 'network protocol'.	I can identify the protocol acronyms.	I can explain the purpose and use of common network protocols.	I can explain why network protocols are needed.
<b>Network Security</b>	I can state the threats to network security.	I can explain using examples, the following security methods: authentication; .encryption;	I can explain how these methods can work together to improve security.	I can explain how MAC addressing facilitates network access.

		firewall; MAC addressing and filtering.		
<b>TCP/IP Model</b>	I can state the 4 layers of the model.	I can state which protocols operate at each layer.	I can describe the function of each layer in a networking environment.	I can explain the benefits of the TCP/IP model.
<b>Security</b>	I can state the fundamental aspects of cyber security.	I can describe cyber security threats.	I can describe black box and white box testing.	I can explain penetration testing and what it is used for.
<b>Social Engineering &amp; Malicious Code</b>	I can define the terms social engineering and malware.	I can describe forms of social engineering.	I can describe forms of malware.	I can describe methods of protection against social engineering and malware.
<b>Cyber Security Threats</b>	I can state security measures.	I can describe a range of security measures.	I can explain the benefits of a range of security measures.	I can recommend appropriate security measures for a given scenario.
<b>Networks</b>	I can state the characteristics of a computer network.	I can describe the main types of computer networks.	I can describe the benefits of each type of computer network.	I can discuss the benefits and risks of computer networks.