

Year 7			Curriculum Checkpoints: What do students know and what can they do?			
Computing			Developing	Securing	Mastering	Excelling
AF1	E-Safety	Knowledge	Understand the terms E-safety, social media and grooming.	Explains the terms E-safety, social media and grooming.	Explain in detail the terms E-safety, social media and grooming.	Explain in detail the terms E-safety, social media and grooming and give real work scenarios.
			Identify some dangers of social media.	Explain some dangers of social media and some ways to stay safe online.	Explain the dangers of social media and grooming and give advice on how to stay safe online.	Explain a large number of dangers of social media and grooming and give appropriate advice on how to stay safe online.
		Practical Skills	Creates a leaflet on the E-safety topic by including some appropriate images and text.	Creates a leaflet on the E-safety topic by including appropriate images and text. Some text may be copied from the internet.	Creates an informative leaflet on the E-safety topic by including appropriate images and text. Little text is copied from the internet.	Creates an informative leaflet on the E-safety topic by including appropriate images, text and advice. No text is copied from the internet.
			Little formatting has been done to improve the appearance of the leaflet.	Some formatting has been done to improve the appearance of the leaflet.	Appropriate formatting has been done to improve the appearance of the leaflet.	Appropriate formatting has been done to create a near professional leaflet.
AF2	Computational Thinking	Knowledge	Identifies the definition of computational terms such as abstraction, decomposition, etc.	Explains key computational terms such as abstraction, decomposition, etc. and there is some attempt at using them to solve problems.	Explains key computational terms such as abstraction, decomposition, and is starting to use them to solve computational problems.	Explains, with examples, key computational terms such as abstraction, decomposition, and is able to use them effectively to solve computational problems.
			Able to match flowcharting symbols to their definitions.	Identifies the names of different flowcharting symbols.	Identifies and explains most flowcharting symbols.	Identifies and explains all of the flowcharting symbols.
		Practical Skills	Creates basic algorithm flowcharts for computer based problems with support.	Creates basic algorithm flowcharts and attempts to use them to solve computer based problems.	Creates accurate algorithm flowcharts to solve computer based problems.	Creates complex algorithm flowcharts to solve computer based real world problems.
AF3	EduBlocks	Knowledge	Identifies the definitions of the programming constructs; sequence, selection and iteration.	Explains the programming constructs; sequence, selection and iteration.	Explains the programming constructs; sequence, selection and iteration. They can identify where the programming constructs have been used to solve problems.	Explains, with examples, the programming constructs; sequence, selection and iteration. They can explain why the different programming constructs have been used to solve problems.
		Practical Skills	Creates simple programs using a block based programming with support.	Creates simple programs using a block based programming language	Produces computer programs using a block based programming language	Produces complex programs using a block based programming language and all the programming principles.
AF4	HTML	Knowledge	Understands HTML tags are mostly used in pairs with an opening and closing tag.	Able to identify some errors in the HTML code and fix them.	Understands the structure of a webpage and is able to identify most errors in the HTML code and fix them.	Understands the structure of a webpage, how the code must be written in a logical order and is able to debug and identify errors in the HTML code and fix them.
			Has knowledge of the basic HTML tags including: paragraph and heading 1.	Has knowledge of some HTML tags including: paragraph, headings, bold, italics and underline.	Has knowledge of most HTML tags including: img, a href, font, etc.	Has knowledge of a wide range of HTML tags including: head, body, title, hyperlink, img etc.
		Practical Skills	Creates a simple web page using HTML with support.	Creates a simple web page using HTML that includes text and images.	Creates a web page using HTML that includes text, images and hyperlinks.	Creates linked web pages using HTML that include text, images and hyperlinks.
	Images	Knowledge	Understands data stored in the computer is in 1s and 0s.	Understands what we see and hear needs to be converted into 1s and 0s for the computer to be able to understand it.	Explains how images and sounds are converted into a digital format for the computer to be able to understand them.	Explains in detail how and why images and sounds are converted into a digital format for the computer to be able to understand them.

AF6	Data Representation and Sound	Practical Skills	Creates simple pixel art images using 2 or 4 colours represented as binary numbers.	Creates pixel art images using 4 colours represented as binary numbers. Understand the terms pixel and resolution.	Creates pixel art using binary numbers to represent colours and can explain how the binary numbers represent each pixel.	Creates pixel art using binary numbers to represent colours and can explain how the resolution of an image can increase the number of pixels and quality of an image.
			Converts sound wave diagrams into 2 bit binary representations with support.	Converts sound wave diagrams into 2 bit binary representations.	Converts sound wave diagrams into 3 bit binary representations and can explain why increasing bit rate increase quality.	Converts sound wave diagrams into 3 bit binary representations and can explain why increasing the bit rate and sample rate can improve the quality of the sound.
AF7	Cyber Security	Knowledge	Can understand the terms cyber security, hacking and malware and what a security breach is.	Can explain the terms cyber security, hacking and malware and know some methods of keeping data safe online.	Explains with examples the terms cyber security, hacking and malware and can recognise ways in which the security of information or devices may be compromised.	Explains in detail a range of cyber security threats and can explain ways in which the security of information or devices may be compromised. Can also understand how access controls, such as firewalls, help protect networks and individual devices.
		Practical Skills	Crack and create secure passwords. You will complete some cyber explorer challenges.	Complete a range of cyber explorer challenges and be able to use cryptography to crack some code breaking tasks.	Complete all cyber explorer challenges involving code breaking, Caesar ciphers and encryption and then create your own codes.	Complete a wide range of code breaking activities and be able to create your own cipher and encryption keys.