

Year 5 Computing Progression Map

	Academy				-	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Торіс	Create digital content (4.4 -5)(4.6 -3)(4.9- 4)/ <mark>e-safety</mark>	Communication & Networks (2.7 -3)/e-safety	Data & Data Representation (4.3 -6)/ <mark>e-safety</mark>	Hardware & Processing (4.8 -2)/ e-safety	Algorithms/ Programming (4.1 -6)(4.5 -4 <mark>)/ e</mark>	
Learning Objective (from DC Pro)	 Recognises the audience when designing and creating digital content. (EV) Understands the potential of information technology for collaboration when computers are networked. (GE) 	is not the web, and the web is not the internet. (AB)	 Performs more complex searches for information (AL) (GE) EV) Analyses and evaluates data and information, and recognises that poor quality data leads to unreliable results, and inaccurate conclusions. (AL)(EV) Uses formulas for the 4 basic operations (AL) (GE) 	Knows the main components in a LAN (local area network) and how they are connected and the advantages and disadvantages of the system (AB)	 Designs solutions (algorithms) the two-way selection i.e. if, then, e Designs a game by decomposing Creates programs that achieve g Uses a range of arithmetic operarelational operators (less than, r (AL) (GE) 	lse (AL) s it into parts. (DE) siven goals. (AL) ators (+ - * /) and
	Demonstrates responsible use of	technologies and online services,	and knows a range of ways to report concerns. (EV)			
Skills			 Use two criteria to search a database and search records Select the correct fields to search Move between applications Use graphs to find implausible data and offer sensible corrections Offer logical answers to implausible data To enter data into cells Use cell references Enter data into a spreadsheet Use formulas for all 4 operations To copy a formula in to other cells To copy and paste grids 	 Know the main components in a LAN and how the components are connected Show the flow of data in a LAN Know the advantages and disadvantages of sharing on a network 	 Complete a flow diagram following repeat patterns Break down a game into parts and order them Debug the complex block programs created Match Scratch blocks to statements Complete an algorithm using repetition Recognise and continue patterns in coding Create a program that achieves given goals Add variables and operators to a game 	
	 <u>Copyright and ownership</u> I can assess and justify when it is acceptable to use the work of others. I can give examples of content that is permitted to be reused. 	Health, Well-being and Lifestyle I can describe ways technology can affect healthy sleep and can describe some of the issues I can describe some strategies, tips or advice to promote healthy sleep with regards to technology	 Online relationships/ Online bullying I can explain that there are some people I communicate with online who may want to do me or my friends harm. I can recognise that this is not my/our fault. I can make positive contributions and be part of online communities. I can describe some of the communities in which I am involved and describe how I collaborate with others positively. I can recognise when someone is upset, hurt or angry online. I can describe how to get help for someone that is being bullied online and assess when I need to do or say something or tell someone. I can explain how to block abusive users. I can explain how I would report online bullying on the apps and platforms that I use. I can describe the helpline services who can support me and what I would say and do if I needed their help (e.g. Childline). 	 <u>Online reputation</u> I can search for information about an individual online and create a summary report of the information I find I can describe ways that information about people online can be used by others to make judgments about an individual. 	 Privacy and security I can create and use strong and secure passwords. I can explain how many free apps or services may read and share my private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others. I can explain how and why some apps may request or take payment for additional content (e.g. in-app purchases) and explain why I should seek permission from a trusted adult before purchasing. 	 <u>Self-image and</u> <u>identity</u> I can explain how identity online can be copied, modifie or altered. I can demonstrate responsible choice about my online identity, dependin on context.
	Online sharing, multimedia effects, multimedia modification, transitions, hyperlinks, editing tools, refining, online sharing	collaboration, different networks, searching strategies, web pages,	spreadsheets, complex searches (and/or; <>), problem solving, present answers, analysed information, question data, interpret, criteria, narrowing a search, fields, implausible, errors, spreadsheets Cell, cell reference, formulas	school network, LAN, components, server, workstation, client, IP address, switch Wireless access point	Explore procedures, refine procedures, variable, hardware and software control, change inputs, different outputs, articulate solutions, flow chart/diagram, repetition, loop	
	responsible online communication, informed choices, virus threats	responsible online communication, informed choices, virus threats	responsible online communication, informed choices, virus threats	responsible online communication, informed choices, virus threats	responsible online communication, informed choices, virus threats	responsible online communication, informed choices, virus threats



Year 5 Computing Progression Map

General ICT Skills:	General Graphics /Video Skills	General Sound Recording Skills	Word Processing	Presentation skills	Internet Skills
General ICT Skills: Create Digital Content	 General Graphics /Video Skills To be able to make an information poster using graphics skills to good effect. 	 General Sound Recording Skills To create a simple digital piece of music using an app Use an app and record instruments and/or their own voice and add to a piece of music. 	 Word Processing To use the word count tool to check the length of a document. To be able to use bullets and numbering tools. 	 Presentation skills To use a range of presentation applications To insert hyperlinks between pages for naviagation To create Mind maps of topics 	 To search for something online To opening multij web pages withou leaving the search To use Google to exclude words from a search. To use more advanced search options in Google To name sources To find physical places with Google Streetview. To understand th terms plagiarism and copyright To present their research in some form - including graphs/tables To use QR codes To collaborate
					 To collaborate online e.g. using blogs, google docs

Explain key concepts including, data, information, fact, opinion belief, trace, raise, value, relate, and concenter.
 Understand the difference between online mis-information (inaccurate information distributed by accident) and dis-information (inaccurate information deliberately distributed and intended to mislead).
 Explain what is meant by 'being sceptical'. I can give examples of when and why it is important to be 'sceptical'.
 Explain what is meant by a 'hoax'. I can explain why I need to think carefully before I forward anything online.

Explain why some information I find online may not be honest, accurate or legal. •

Explain why information that is on a large number of sites may still be inaccurate or untrue. I can assess how this might happen (e.g. the sharing of misinformation either by accident or on purpose). •

Computer Science
Information Technology
Digital Literacy



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