

Computing Progression Map

	EYFS		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
3-4 years old Personal, Social and Emotional Development Physical Development Understanding the World	Remember rules without needing an adult to remind them. Match their developing physical skills to tasks and activities in the setting. Explore how things work	Computer Science	- I can understand what algorithms are. - I can begin to create simple programmes to solve simple problems. - I can use logical reasoning to predict the behaviour of simple programs.	- I understand that algorithms are implemented as programs on digital devices and need to be clear and sequenced accurately. - I can create simple programs by using precise and unambiguous instructions. - I can identify and debug errors in my code. - I can use logical reasoning to predict the behaviour of simple programs including using loops.	- I can work with various forms of input [mouse, keyboard, microphones] and output [SAMs Lab, sound] - I can design and modify programs that accomplish specific goals by using: - Accurate sequencing of algorithms - loops to aid efficient algorithms - logical reasoning to predict the behaviour of simple programs and debugging errors in my code. - I can understand how computers can be linked to create a local network. - I understand that emails are broken down into packets of information that are sent across the internet.	- I can design programs that accomplish specific goals by using: - repetition including forever and nested loops. - Use conditional selection in algorithms and programs [if...then... ; user input] - logical reasoning to predict the behaviour of simple programs and debugging errors in my code. - I can control or simulate physical systems [Microbit, Sphero, SAMs Lab] - I understand how computer networks can provide multiple services, such as the world wide web and is made up of lots of components that transfer data. - I appreciate how search results are selected - I understand all computer data is represented using binary, a number system that uses 0s and 1s	- I can design programs that accomplish specific goals by using: - logical reasoning to predict the behaviour of simple programs and debugging errors in my code. - conditional selection [if...then... ; if...else...] - repetition including forever and nested loops. - working with variables [creating scores] - broadcasts in my programs. - procedures (run scripts multiple times) - designing and planning my own computer games. - I understand and explain how computer networks work including the internet being a collection of computers connected. - I appreciate how search results are ranked.	- I can design programs that accomplish specific goals by using: - logical reasoning to predict the behaviour of simple programs and debugging errors in my code. - repetition including forever and nested loops. - working with variables [creating scores] - using conditional statements (If...then... else) - using broadcasts in my programs. - using operators (< = >) - procedures (run scripts multiple times) - designing and planning my own computer games. - I understand the hardware components that make up a computer system. - I understand how numbers, text and pictures can be represented in binary.
Reception Personal, Social and Emotional Development	Show resilience and perseverance in the face of a challenge. Know and talk about the different factors that support their	Information Technology	- I can name a range of digital devices [i.e. washing machines, car, laptops] - I can use technology purposefully to create digital content [drawing pictures, moving images]	- I can identify a variety of inputs [keyboard and mouse] and outputs [speakers, screen, printer] and explain what they are used for. - I can decide which piece of technology or program might be chosen to	- I can collect, organise and present information using a variety of media [audio, video, text]. - I can design, edit and create purposeful digital content to accomplish given goals.	- I can combine a variety of software to design, edit and create purposeful digital content to accomplish given goals. - I can use technology to collect, analyse and evaluate information [ie. Data loggers, surveys].	- I can combine a variety of software to design, edit and create purposeful digital content to accomplish given goals. - I can select and choose the appropriate digital device [cameras, iPads, laptops]	- I can undertake creative projects with challenging goals [ie. 3D modelling] - I can combine a variety of software to design, edit and create purposeful digital content to accomplish given goals.

Physical Development	overall health and wellbeing:-sensible amounts of ‘screen time Develop their small motor skills so that they can use a range of tools competently, safely and confidently.		- I can use technology purposefully to retrieve digital content. [ie. Internet] - I can begin to use a range of input devices [keyboard, mouse or touch input on an iPad]	present information [text, video, audio, data – charts and pictograms] - I can use technology purposeful to edit and manipulate [paint, take pictures] and then store [files, folders] digital content. - I can use technology purposeful to organise and retrieve digital content. [ie. Internet] - I can begin to type using all of my fingers. - I can begin to use a range of input devices [mouse or touch input on an iPad]	- I can store and organise digital content by using files and folders. - I can use search technologies effectively. - I can search, analyse and present data to convey information [charts, databases, spreadsheets]. - I can evaluate existing and their own digital content. - I can type using all of my fingers. - I can use right and left click on a mouse or use different form of selection on an iPad [ie long press]	- I can store and organise digital content by using files and folders. - I can use search technologies effectively. - I can evaluate existing and their own digital content. - I can use the keyboard confidently - I can use right and left click on a mouse or use different form of selection on an iPad [ie long press]	- I can use technology to collect, analyse and evaluate information [ie. Data loggers, surveys]. - I can store and organise digital content by using files and folders. [copy, move and delete files] - I can recognise common file types and extensions. - I can use the keyboard confidently to type at a suitable pace. - I can use advanced searching techniques when using a search engine.	- I can select and choose the appropriate digital device [cameras, iPads, laptops] - I can use technology to collect, analyse, filter and evaluate information [ie. Data loggers, surveys]. - I can store and organise digital content by using files and folders. [copy, move and delete files] - I can recognise common file types and extensions. - I can use the keyboard confidently to type at a suitable pace. - I can use advanced searching techniques when using a search engine. - I can evaluate my own digital content and make improvements accordingly.
ELG Personal, Social and Emotional Development Managing Self. Expressive Arts and Design Creating	Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. Explain the reasons for rules, know right from wrong and try to behave accordingly. Safely use and explore a variety of materials, tools and	Digital Literacy	- I can identify common uses of technology [libraries, supermarkets, banks etc.] - I can identify and explain why my personal information needs to be kept private [password, address]. - I can identify what type of help is available for me. - I can identify and explain why certain content may cause me or others harm.	- I can identify and explain why my personal information needs to be kept private [password, address] - I can identify what type of help is available for me. - I can explain why certain content may cause me or others harm. - I can explain who I would go to if I had concerns over online contact. - I know that digital content belongs to the person who has created it and that	- I can identify and explain why my personal information needs to be kept private [address, passwords] - I can explain why certain content may cause me or others harm. - I can explain who I would go to if I had concerns over online contact. I know that digital content belongs to the person who has created it and that not all information	- I can identify and explain why my personal information needs to be kept private [addresses, passwords] - I can identify acceptable and unacceptable behaviour online. - I know that digital content belongs to the person who has created it and that not all information found online is true. - I can begin to recognise suspicious behaviour in phishing emails, text	- I can identify and explain why my personal information needs to be kept private and the potential impact on their digital footprint. - I can identify acceptable and unacceptable behaviour online. - I can explain who I would go to if I had concerns over online contact. - I can engage in online communities safely, respectfully and responsibly.	- I can identify and explain why my personal information needs to be kept private and the potential impact on their digital footprint. - I can identify acceptable and unacceptable behaviour online. - I can explain how to report concerns over online contact. - I can engage in online communities safely, respectfully and responsibly. - I can be discerning about what

with Materials	techniques, experimenting with colour, design, texture, form and function.			not all information found online is true.	found online is true.	messages and social media. - I can explain who I would go to if I had concerns over online contact. - I can understand the opportunities computer networks for communication.	- I can be discerning about what information I gather, checking the validity of data and showing due respect to privacy and copyright. - I can identify the components of a strong password.	information I gather, checking the validity of data and showing due respect to privacy and copyright.
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