Curriculum Progression Document – Computing

	Digital Literacy	Information Technology	Online Safety	Computer Science
Year 1	• to access different types of media content on their device. Including; sound, images, books, podcasts/ audiobooks and video via the web. • about the uses and purpose of technology in the classroom, at home, work and the world around them.	• to create different types of digital content (short video, ebook or presentation). • to combine text and images in a document that showcases learning or tells a story. • how they can use a search engine to find answers and different types of media category e.g. images, book, videos.	• how to access and search the web. • to identify people they can trust and who they can ask for help when using the internet. • to send a digital message. • how they should behave and interact with others in the online world	• to explore algorithms and sequencing of instructions. • to read, follow and create a simple sequence algorithm. • about signing into a device or online platform. • how they can use a search engine to find answers and different types of media e.g. videos.
Year 2	• where different types of media content can be found online. Including; sound, images, books, podcasts/ audiobooks and video via the web. • to explore their own use of the internet and why it is important to stick to the rules.	• to create a presentation or basic digital book that is well designed, contains formatted text, images and presents information. • to read a simple database to find information. • the basic skills of searching and navigating	• about safe and unsuitable sites/apps. e.g. PEGI rating. • to talk to a trusted adult before sharing personal information online and using strong passwords.	• about writing algorithms that can be turned into programs. • to implement their algorithm as a program on a digital device or programmable toy/ robot.

			the results in a search engine to answer questions.	• that the characters and people they interact with may be computer generated / including games. • the differences between the Internet and the physical world.	• multiple services use the internet e.g. email, web and streaming. • the basic skills of searching and navigating the results in a search engine.
Year 3	• how to make judgements about the usefulness and accuracy of information. • about the term 'fake news'. • about what copyright is and why we have copyright laws. • to recognise copyright material. • that the internet is a computer network. • that the internet can provide multiple services, such as the world wide web, streaming music/ video and email.	• to create digital content using a range of mixed tools/media and how to improve its design. • to create a plan/ storyboard when producing digital content. • to use search engines to collect information.	• the SMART rules about using the internet safely and responsibly. • what personal information is and what they shouldn't be sharing. • they should pause before posting and consider the potential consequences. • who they should seek help from about online concerns.	• to create a detailed flow diagram using the correct symbols. • to turn an algorithm into a simple program on a digital device. • to send an email and understands how this works. how information travels through computer networks. • about testing the program and recognising when it needs to be debugged. • that search engines try to put the most useful websites at the top.	

Year 4	• more about what Fake News is, it's purpose and that Fake News can be found on all media. • how to identify Fake News. • that data can be manipulated to make Fake News appear to be true • to differentiate between apps that use the Internet, the school network or that are self-contained on a device. • to use computing to communicate and collaborate.	• to produce documents, media and presentations with increasing independence and competency that present data/ information. • about new forms of technology E.g. AR, Virtual Reality, Wearable Technology etc. • that not all sources of information including websites are accurate and can check information using a different sites.	• the safety features of websites and apps. e.g. block or report. • they should report concerns to a trusted adult. • not to reveal private information to a person they know only online. • that friends/followers profiles may not reflect the truth about their real lives.	• to design a simple algorithm to show a real-life situation. • about the valuable skills of abstraction and decomposition when tackling more complex problems. • to recognise the main components (hardware) which allow computers to join and form a network. • that search engines use algorithms to sort websites.
Year 5	• about how and why information found on some sites will be biased. • how to source copyright free materials to use in their digital projects. • about different online communication	• to produce digital content in a given format e.g. podcasts, videos, AR, virtual reality, 3D, digital music or illustrations. • to use a spreadsheet / database to collect, record data and to use simple formulae.	• to demonstrate and explain the importance of communicating kindly and respectfully. • about the negative online behaviours such as bullying, trolling, griefing and harassment.	• to explore problem solving and decomposition. • to independently plan, write and test their algorithms and create more complex programs, debugging as needed.

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	• tools/apps and how they could be used for different purposes e.g. work and social. • about working in a group using collaborative tools	• check the reliability of information on the internet.	• about empathy and the effects of online bullying. • anything they post online can be seen, re-shared, re-used and may have a negative effect on others. • how to avoid being tricked by scammers online. E.g. Phishing emails. The child can explain why an app may be free but have in-apppurchasing and what that is.	• about controlling / simulating physical systems and using sensors with multiple outcomes • about software, hardware and types of connected computers. • about how data travels via the internet including binary. • key skills for using a search engine. • about the settings that can alter your search results.
Year 6	• to explore in more depth the legal and moral reasons not to plagiarise or infringe copyright and the impact it can have on the creator of the content. • about digital crimes and threats that might exist online. E.g. worms,	• to create digital storyboards with a complete narrative of the project or investigation • to independently select, use and combine the appropriate technology/app tools to create effects that will	• the advice they should/would give friends about making good choices online. • the consequences of making poor online choices e.g. Online bullying, Inappropriate comments	• to create complex algorithms and turn their designs into a program (incorporating variables, procedures and different forms of input and output). • in more detail about how information/data is transported on the

	trojans, viruses, spyware, ransomware and malware. • about anti-virus software and how they can help protect devices from infection. • advanced web terminology e.g. firewall, security updates, pop up blocker, scams, phishing, HTTPs, location based settings, in app purchasing, trolling, filtering etc.	have an impact on others and tell a story • to use complex searches, filters and advanced tools to find, select and use information	• the way men and women can be stereotyped in movies and TV • how to block and report inappropriate comments or behaviour online.	Internet and between computers using packets and IP addresses. • about the opportunities computer networks and the internet offer for communication and collaboration. • to explore advanced features within search engines and learn to use them effectively.