

# Year 6 Computing Overview - Information Tech

Computing Strand	NC Objectives	Skills/Knowledge	Date covered			
Word Processing/ Typing	Co2/1.6 select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	<ul style="list-style-type: none"> <li>I can confidently choose the best application to demonstrate my learning.</li> <li>I can format text to suit a purpose.</li> <li>I can publish my documents online regularly and discuss the audience and purpose of my content.</li> </ul>				
Data Handling		<ul style="list-style-type: none"> <li>I can write spreadsheet formula to solve more challenging maths problems.</li> <li>I can create and publish my own online quiz with a range of media (images and video)</li> </ul>				
Presentations, web design and eBook Creation		<ul style="list-style-type: none"> <li>I can create a web site which includes a variety of media.</li> <li>I can design an app prototype that links multimedia pages together with hyperlinks.</li> <li>I can choose applications to communicate to a specific audience.</li> <li>I can evaluate my own content and consider ways to improvements.</li> </ul>				
Animation		<ul style="list-style-type: none"> <li>I can mix animations and videos recordings of myself to create video interviews.</li> <li>I can plan, script and create a 3D animation to explain a concept or tell a story.</li> <li>I can choose and create different types of animations to best explain my learning.</li> </ul>				
Video Creation		<ul style="list-style-type: none"> <li>I can use the green screen masking tool with more than one character.</li> <li>I can use picture in picture tools in iMovie.</li> <li>I can add animated subtitles to my film to further enhance my creation.</li> <li>I can create videos using a range of media - green screen, animations, film and image.</li> </ul>				
Photography and Digital Art		<ul style="list-style-type: none"> <li>I can edit a picture to remove items, add backgrounds, merge 2 photos</li> <li>I can evaluate and discuss images explaining effects and filters that have been used to enhance the media.</li> <li>Use a 3D drawing app to create a realistic representation of world objects</li> </ul>				
Augmented Reality and Virtual Reality		<ul style="list-style-type: none"> <li>I can edit a picture to remove items, add backgrounds, merge 2 photos</li> <li>I can evaluate and discuss images explaining effects and filters that have been used to enhance the media.</li> <li>Use a 3D drawing app to create a realistic representation of world objects</li> </ul>				
Sound		<ul style="list-style-type: none"> <li>Add voice over and edit sound clips (volume, pitch, fade, effect) to use in a film or radio broadcast (podcast)</li> <li>Compose a soundtrack that can be added to a film project.</li> </ul>				

# Year 6 Computing Overview - Computer Science

Computing Strand	NC Objectives	Skills/Knowledge	Date covered			
Computational Thinking	<ul style="list-style-type: none"> <li>Co2/1.1 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>Co2/1.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> </ul>	<ul style="list-style-type: none"> <li>I can recognise, and make use, of patterns across programming projects</li> <li>I can write precise algorithms for use when programming</li> <li>I can identify variables needed and their use in selection and repetition</li> <li>I can decompose code into sections for effective debugging</li> <li>I can critically evaluate my work and suggest improvements</li> </ul>				
Coding and Programming	<ul style="list-style-type: none"> <li>Co2/1.3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>Co2/1.4 understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration</li> </ul>	<ul style="list-style-type: none"> <li>I can use a range of sequence, selection and repetition commands combined with variables as required to implement my design</li> <li>I can create procedures to hide complexity in programs</li> <li>I can identify and write generic code for use across multiple projects</li> <li>I can critically evaluate my work and suggest improvements</li> <li>I can identify and use basic HTML tags (See Computer Networks objectives)</li> </ul>				
Computer Networks	<ul style="list-style-type: none"> <li>Co2/1.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> </ul>	<ul style="list-style-type: none"> <li>I understand what HTML is and recognize HTML tags</li> <li>I know a range of HTML tags and can remix a web page</li> <li>I can create a webpage using HTML</li> </ul>				

## Digital Literacy/ESafety - Education For a Connected World Objectives

<u>NC Objectives</u>	<u>Year 6</u>	<u>Skills</u>	<u>Date Covered</u>			
<p>Co2/1.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	Self Image and Identity	<ul style="list-style-type: none"> <li>• I can describe ways in which media can shape ideas about gender.</li> <li>• I can identify messages about gender roles and make judgements based on them.</li> <li>• I can challenge and explain why it is important to reject inappropriate messages about gender online.</li> <li>• I can describe issues online that might make me or others feel sad, worried, uncomfortable or frightened. I know and can give examples of how I might get help, both on and offline.</li> <li>• I can explain why I should keep asking until I get the help I need.</li> </ul>				
	Online Relationships	<ul style="list-style-type: none"> <li>• I can show I understand my responsibilities for the well-being of others in my online social group.</li> <li>• I can explain how impulsive and rash communications online may cause problems (e.g. flaming, content produced in live streaming).</li> <li>• I can demonstrate how I would support others (including those who are having difficulties) online.</li> <li>• I can demonstrate ways of reporting problems online for both myself and my friends.</li> </ul>				
	Online Reputation	<ul style="list-style-type: none"> <li>• I can explain how I am developing an online reputation which will allow other people to form an opinion of me.</li> <li>• I can describe some simple ways that help build a positive online reputation</li> </ul>				
	Online Bullying	<ul style="list-style-type: none"> <li>• I can describe how to capture bullying content as evidence (e.g. screen-grab, URL, profile) to share with others who can help me.</li> <li>• I can identify a range of ways to report concerns both in school and at home about online bullying.</li> </ul>				

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<p>Co2/I.4 understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration</p> <p>Co2/I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>	Managing Online Information	<ul style="list-style-type: none"> <li>I can use search technologies effectively.</li> <li>I can explain how search engines work and how results are selected and ranked.</li> <li>I can demonstrate the strategies I would apply to be discerning in evaluating digital content.</li> <li>I can describe how some online information can be opinion and can offer examples.</li> <li>I can explain how and why some people may present 'opinions' as 'facts'. I can define the terms 'influence', 'manipulation' and 'persuasion' and explain how I might encounter these online (e.g. advertising and 'ad targeting').</li> <li>I can demonstrate strategies to enable me to analyse and evaluate the validity of 'facts' and I can explain why using these strategies are important.</li> <li>I can identify, flag and report inappropriate content.</li> </ul>			
	Health, Well-being and Lifestyle	<ul style="list-style-type: none"> <li>I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.</li> <li>I can assess and action different strategies to limit the impact of technology on my health (e.g. nightshift mode, regular breaks, correct posture, sleep, diet and exercise).</li> <li>I can explain the importance of selfregulating my use of technology; I can demonstrate the strategies I use to do this (e.g. monitoring my time online, avoiding accidents ).</li> </ul>			
	Privacy and Security	<ul style="list-style-type: none"> <li>I use different passwords for a range of online services.</li> <li>I can describe effective strategies for managing those passwords (e.g. password managers, acronyms, stories).</li> <li>I know what to do if my password is lost or stolen.</li> <li>I can explain what app permissions are and can give some examples from the technology or services I use.</li> <li>I can describe simple ways to increase privacy on apps and services that provide privacy settings. I can describe ways in which some online content targets people to gain money or information illegally;</li> <li>I can describe strategies to help me identify such content (e.g. scams, phishing)</li> </ul>			
	Copyright and Ownership	<ul style="list-style-type: none"> <li>I can demonstrate the use of search tools to find and access online content which can be reused by others.</li> <li>I can demonstrate how to make references to and acknowledge sources I have used from the internet</li> </ul>			

