



Sparken Hill Academy



Year Group Overviews

In this document we have taken all the I Can Statements from the Whole School Progression Document and sorted them by Year Group. This will hopefully help teachers better embed and cover the computing curriculum. We have also added a few columns for teachers to date as to when they have been covered. These dates can link and correspond to work produced which has been evidenced digitally through Seesaw.

Here is an overview of how we have broken the Computing Curriculum:

Information Technology	Computer Science	Digital Literacy
Word Processing/Typing	Computational Thinking	Self Image and Identity
Data Handling	Programming	Online Relationships
Presentations, Web design and eBook Creation	Computer Networks	Online Reputation
Animation		Online Bullying
Video Creation		Managing Online Information
Photography and Digital Art		Health, Wellbeing and Lifestyle
Augmented Reality and Virtual Reality		Privacy and Security
Sound		Copyright and Ownership



Sparken Hill Academy

Year 5 Computing Overview

Year 5 Computing Overview - Information Tech

Computing Strand	NC Objectives	Skills/Knowledge	Date covered			
Word Processing/ Typing	Co2/I.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, evalu ating and presenting data and information.	- I can start to apply other useful effects to my documents such as hyperlinks. - I can import sounds to accompany and enhance the text in my document. - I can organise and reorganise text on screen to suit a purpose				
Data Handling		- I can create and publish my own online questionnaire and analyse the results. - I can use simple formulae to solve calculations including =sum and other statistical functions - I can edit and format difference cells in a spreadsheet.				
Presentations, web design and eBook Creation		- I can collaborate with peers using online tools, e.g. blogs, Google Drive, Office 365 - I can create and export an interactive presentation including a variety of media, animations, transitions and other effects. - I can create an interactive guide to a image by embedding digital content and publishing it online. - I can create a webpage and embed video.				
Animation		- I can record animations of different characters and edit them together to create an interview. - I can add green screen effects to a stop motion animation. - I can create flip book animation using digital drawings and export as a Gif or video				
Video Creation		- I can use cutaway and split screen tools in iMovie. - I can evaluate and improve the best video tools to best explain my understanding. - I can further improve green screen clips using crop and resize and explore more creative ways to use the tool - wearing green clothes and the masking tool.				
Photography and Digital Art		- I can make a digital photo using camera settings - I can enhance digital photos and images using crop, brightness and resize tools - I can link and explain how to photoshop images and how this is used in the media				
Augmented Reality and Virtual Reality		- I can create an interactive VR experience. - I can create an animated object and bring it into my surroundings through AR - I can create an AR experience using objects I have created to explain a concept.				
Sound		- Add voice over and edit sound clips (volume, pitch, fade, effect) to create a podcast. - Create a remix of a popular song.				

Year 5 Computing Overview - Computer Science

Computing Strand	NC Objectives	Skills/Knowledge	Date covered			
Computational Thinking	- Co2/I.1 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts - Co2/I.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output	- I can solve problems by decomposing them into smaller parts - I can use selection in algorithms - I can recognise the need for conditions in repetition within algorithms - I can use logical reasoning to explain how a variety of algorithms work - I can use logical reasoning to detect and correct errors in algorithms - I can evaluate my work and identify errors				
Coding and Programming	- Co2/I.3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs - 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	- I can create programs by decomposing them into smaller parts - I can use selection in programs - I can use conditions in repetition commands - I can work with variables - I can create programs that control or simulate physical systems - I can evaluate my work and identify errors				
Computer Networks	Co2/I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	- I understand how we view web pages on the Internet - I use search technologies effectively - I understand that web spiders index the web for search engines - I appreciate how pages are ranked in a search engine				

Digital Literacy/ESafety - Education For a Connected World Objectives

<u>NC Objectives</u>	<u>Year 5</u>	<u>Skills</u>	<u>Date Covered</u>			
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	Self Image and Identity	- I can explain how identity online can be copied, modified or altered. - I can demonstrate responsible choices about my online identity, depending on context.				
	Online Relationships	- 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.				
	Online Reputation	- 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.				
	Online Bullying	- 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).				

Digital Literacy/ESafety - Education For a Connected World Objectives

<u>NC Objectives</u>	<u>Year 5</u>	<u>Skills</u>	<u>Date Covered</u>		
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 Co2/I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Managing Online Information	• I can use different search technologies. • I can evaluate digital content and can explain how I make choices from search results. • I can explain key concepts including: data, information, fact, opinion belief, true, false, valid, reliable and evidence. • I understand the difference between online mis-information (inaccurate information distributed by accident) and dis-information (inaccurate information deliberately distributed and intended to mislead). I can explain what is meant by 'being sceptical'. • I can give examples of when and why it is important to be 'sceptical'. I can explain what is meant by a 'hoax'. • I can explain why I need to think carefully before I forward anything online. • I can explain why some information I find online may not be honest, accurate or legal. • I can 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).			
	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			
	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.			
	Copyright and Ownership	• 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.			



Sparken Hill Academy

Year 6 Computing Overview

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.	- I can confidently choose the best application to demonstrate my learning. - I can format text to suit a purpose. - I can publish my documents online regularly and discuss the audience and purpose of my content.				
Data Handling		- I can write spreadsheet formula to solve more challenging maths problems. - I can create and publish my own online quiz with a range of media (images and video)				
Presentations, web design and eBook Creation		- I can create a web site which includes a variety of media. - I can design an app prototype that links multimedia pages together with hyperlinks. - I can choose applications to communicate to a specific audience. - I can evaluate my own content and consider ways to improvements.				
Animation		- I can mix animations and videos recordings of myself to create video interviews. - I can plan, script and create a 3D animation to explain a concept or tell a story. - I can choose and create different types of animations to best explain my learning.				
Video Creation		- I can use the green screen masking tool with more than one character. - I can use picture in picture tools in iMovie. - I can add animated subtitles to my film to further enhance my creation. - I can create videos using a range of media - green screen, animations, film and image.				
Photography and Digital Art		- I can edit a picture to remove items, add backgrounds, merge 2 photos - I can evaluate and discuss images explaining effects and filters that have been used to enhance the media. - Use a 3D drawing app to create a realistic representation of world objects				
Augmented Reality and Virtual Reality		- I can edit a picture to remove items, add backgrounds, merge 2 photos - I can evaluate and discuss images explaining effects and filters that have been used to enhance the media. - Use a 3D drawing app to create a realistic representation of world objects				
Sound		- Add voice over and edit sound clips (volume, pitch, fade, effect) to use in a film or radio broadcast (podcast) - Compose a soundtrack that can be added to a film project.				

Year 6 Computing Overview - Computer Science

Computing Strand	NC Objectives	Skills/Knowledge	Date covered			
Computational Thinking	- Co2/I.1 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts - Co2/I.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output	- I can recognise, and make use, of patterns across programming projects - I can write precise algorithms for use when programming - I can identify variables needed and their use in selection and repetition - I can decompose code into sections for effective debugging - I can critically evaluate my work and suggest improvements				
Coding and Programming	- Co2/I.3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs - 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	- I can use a range of sequence, selection and repetition commands combined with variables as required to implement my design - I can create procedures to hide complexity in programs - I can identify and write generic code for use across multiple projects - I can critically evaluate my work and suggest improvements - I can identify and use basic HTML tags (See Computer Networks objectives)				
Computer Networks	Co2/I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	- I understand what HTML is and recognize HTML tags - I know a range of HTML tags and can remix a web page - I can create a webpage using HTML				

Digital Literacy/ESafety - Education For a Connected World Objectives

<u>NC Objectives</u>	<u>Year 6</u>	<u>Skills</u>	<u>Date Covered</u>			
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	Self Image and Identity	• I can describe ways in which media can shape ideas about gender. • I can identify messages about gender roles and make judgements based on them. • I can challenge and explain why it is important to reject inappropriate messages about gender online. • 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. • I can explain why I should keep asking until I get the help I need.				
	Online Relationships	• I can show I understand my responsibilities for the well-being of others in my online social group. • I can explain how impulsive and rash communications online may cause problems (e.g. flaming, content produced in live streaming). • I can demonstrate how I would support others (including those who are having difficulties) online. • I can demonstrate ways of reporting problems online for both myself and my friends.				
	Online Reputation	• I can explain how I am developing an online reputation which will allow other people to form an opinion of me. • I can describe some simple ways that help build a positive online reputation				
	Online Bullying	• I can describe how to capture bullying content as evidence (e.g screen-grab, URL, profile) to share with others who can help me. • I can identify a range of ways to report concerns both in school and at home about online bullying.				

Digital Literacy/ESafety - Education For a Connected World Objectives

<u>NC Objectives</u>	<u>Year 6</u>	<u>Skills</u>	<u>Date Covered</u>		
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 Co2/I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Managing Online Information	• I can use search technologies effectively. • I can explain how search engines work and how results are selected and ranked. • I can demonstrate the strategies I would apply to be discerning in evaluating digital content. • I can describe how some online information can be opinion and can offer examples. • 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'). • 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. • I can identify, flag and report inappropriate content.			
	Health ,Well-being and Lifestyle	• I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose. • 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). • 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).			
	Privacy and Security	• I use different passwords for a range of online services. • I can describe effective strategies for managing those passwords (e.g. password managers, acronyms, stories). • I know what to do if my password is lost or stolen. • I can explain what app permissions are and can give some examples from the technology or services I use. • 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; • I can describe strategies to help me identify such content (e.g. scams, phishing)			
	Copyright and Ownership	• I can demonstrate the use of search tools to find and access online content which can be reused by others. • I can demonstrate how to make references to and acknowledge sources I have used from the internet			