

Computing Curriculum



ICT Whole School Topic Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Computer Science	Information Technology	Computer Science	Computer Science	Information Technology	Digital Literacy
	Outcome: Instructions Software: Daisy Dino	Outcome: Graphics Software: Pic Collage / Google Docs	Outcome: Logo Software: BeeBots/2Logo	Outcome: Coding Software: Purple Mash	Outcome: Digital Text Software: Book Creator	Outcome: Video Software: IMovie
Year 2	Digital	Computer	Digital	Digital	Information	Computer
	Literacy	Science	Literacy	Literacy	Technology	Science
	Outcome: Internet Search Software: Internet / Google Doc	Outcome: Logo Software: 2Logo / Scratch	Outcome: Video Software: Imovie	Outcome: Email Software: 2Email	Outcome: Branching Database Software: 2Question	Outcome: Instructions Software: Espresso (Unit 2b)
Year 3	Computer	Computer	Computer	Digital	Information	Information
	Science	Science	Science	Literacy	Technology	Technology
	Outcome: Logo Software: Purple Mash 2Logo / Scratch	Outcome: Programming Software: 2Code	Outcome: Programming Software: Scratch	Outcome: eBook Software: Google Slides	Outcome: Spreadsheet Software: Excel	Outcome: Graphics Software: Paint Programme
Year 4	Digital	Information	Computer	Digital	Digital	Computer
	Literacy	Technology	Science	Literacy	Literacy	Science
	Outcome: Animation Software: Pivot Animator / I Can Animate (App)	Outcome: Data Base Software: 2Investigate	Outcome: Animations Software: Espresso Coding (Unit 4b)	Outcome: Email Software: 2Email	Outcome: Photo Story Software: Windows Media Player	Outcome: Quiz Software: Scratch
Year 5	Computer	Information	Information	Computer	Digital	Computer
	Science	Technology	Technology	Science	Literacy	Science
	Outcome: Computer Game Software: Scratch	Outcome: 3d Modelling Software: Sketch Up	Outcome: Spread sheet Software: Microsoft Excel	Outcome: Website Building Software: Espresso HTML (Unit 1)	Outcome: Podcast Software: GarageBand	Outcome: Website Building Software: Espresso HTML (Unit 2)
Year 6	Digital	Information	Computer	Computer	Information	Digital
	Literacy	Technology	Science	Science	Technology	Literacy
	Outcome: Film Software: We Video	Outcome: Spreadsheet Software: Microsoft Excel	Outcome: Computer Game Software: Purple Mash	Outcome: Website Building Software: Espresso HTML (Unit 3)	Outcome: 3d Modelling Software: Sketch Up	Outcome: E Safety Software: None



	Computer Science	Information Technology	<u>Digital Literacy</u>	<u>E-Safety</u>
Year 1	Understand what algorithms are Create simple programs	 Use technology purposefully to create digital content Use technology purposefully to store digital content Use technology purposefully to retrieve digital content 	Use technology safely Keep personal information private Recognise common uses of information technology beyond school	 Make decisions about whether or not statements or images found on the internet are likely to be true. Identify different devices that can go on the internet, and separate those that do not. Identify what things count as personal information. Identify when inappropriate content is accessed and act appropriately. Know how and why ICT is used in the home. Login and log out of devices in a public domain (school) using shared class login details.
Year 2	 Understand that algorithms are implemented as programs on digital devices Understand that programs execute by following precise and unambiguous instructions Debug simple programs Use logical reasoning to predict the behaviour of simple programs 	Use technology purposefully to organise digital content Use technology purposefully to manipulate digital content	Use technology respectfully Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	 Identify obviously false information in a variety of contexts. Recognise that a variety of devices (Xbox, PSP etc. as well as computers and phones) connect users with other people. Identify personal information that should be kept private. Consider other people's feelings on the internet. Create and use top safety tips. Login and log out of devices in a public domain (school) using shared class login details
Year 3 and 4	 Write programs that accomplish specific goals Use sequence in programs Work with various forms of input Work with various forms of output 	 Use search technologies effectively Use a variety of software to accomplish given goals Collect information Design and create content Present information 	Use technology responsibly Identify a range of ways to report concerns about contact	Question the "validity" of what they see on the internet. Use a browser address bar not just search box and shortcuts. Think before sending and suggest consequences of sending/posting. Recognise online behaviours that would be unfair. Log in and log out of devices in a public domain (in school). Know that passwords do not need to be private in a secure, public (school) domain.
				Recognise social networking sites and social networking features built into other things (such as online games and handheld games consoles). Make judgments in order to stay safe, whilst communicating with others online. Tell an adult if anything worries them online. Identify dangers when presented with scenarios, social networking profiles, etc. Articulate examples of good and bad behaviour online. Log in and log out of devices in a public domain (in school). Know that passwords do not need to be private in a secure, public school domain.
Year 5	 Design programs that accomplish specific goals Design and create programs Debug programs that accomplish specific goals Use repetition in programs Control or simulate physical systems Use logical reasoning to detect and correct errors in programs Understand how computer networks can provide multiple services, such as the World Wide Web Appreciate how search results are selected 	 Select a variety of software to accomplish given goals Select, use and combine internet services Analyse information Evaluate information Collect data Present data 	Understand the opportunities computer networks offer for communication Identify a range of ways to report concerns about content Recognise acceptable/unacceptable behaviour	 Judge what sort of privacy settings might be relevant to reducing different risks. Judge when to answer a question online and when not to. Be a good online citizen and friend, not a digital bystander. Articulate what constitutes good behaviour online. Find and cite the web address for any information or resource found online. Use different sources to double check information found. Explain the difference between logging in and logging out of public and private domains using devices within school and be able to explain why personal passwords are not appropriate for a secure, public school domain.
Year 6	Solve problems by decomposing them into smaller parts Use selection in programs Work with variables Use logical reasoning to explain how some simple algorithms work Use logical reasoning to detect and correct errors in algorithms Understand computer networks, including the internet Appreciate how search results are ranked	 Combine a variety of software to accomplish given goals Select, use and combine software on a range of digital devices Analyse data Evaluate data Design and create systems 	 Understand the opportunities computer networks offer for collaboration Be discerning in evaluating digital content 	 Find report and flag buttons in commonly used sites and name sources of help (Childline, Cyber mentors, etc.) 'Click-CEOP' button and explain to parents what it is for. Discuss scenarios involving online risk. State the source of information found on the internet. Act as a role model for younger pupils, including promoting Sid's Top Tips. Explain the difference between logging in and logging out of public and private domains using devices within school and be able to explain why personal passwords are not appropriate for a secure, public school domain