

Key Skills			
Foundation	Year 1 & 2	Year 3 & 4	Year 5 & 6
<ul style="list-style-type: none"> Develop their fine motor skills so that they can use a range of tools competently, safely and confidently. 	<ul style="list-style-type: none"> Boot-up and Shut Down devices correctly Log-on and Log-off Laptops using individual username and password Open and close Applications on PC and Tablets Use trackpad and mouse buttons to navigate cursor including click-and drag. – Use basic finger-swipe gestures on Touch screens save, retrieve and organise work 	<ul style="list-style-type: none"> Understand how digital device work. (Accept inputs & produce outputs). Classify input and output devices, describe a process and design a device. To recognise how digital devices can change the way that we work. Understand how digital devices are connected to form networks. I can explain the role of a switch, server, and wireless access point in a network and know how they are connected. 	<ul style="list-style-type: none"> Understand the movement of a file between digital locations Move different file types between digital locations Know specific location of personal and school files Work at home and school on digital tasks Store schoolwork in OneDrive in organised file structure
Key Vocabulary	Username, password, Documents, Index finger typing, Enter/return, Caps lock, Backspace, delete, Home button, App, open, close, Save, Retrieve	Input, output, process, network, digital device, connected, switch, server, wireless access point, data transfer	Network, filepath, Cloud, storage, server, Office365, GoogleDrive, OneDrive, Cloud, TEAMS, upload, download, backup, sync.

Online Safety			
Foundation	Year 1 & 2	Year 3 & 4	Year 5 & 6
Personal, Social and Emotional Development • Explain the reasons for rules and explain right from wrong. • Show resilience and perseverance in the face of a challenge.	<ul style="list-style-type: none"> • Create, name and date digital creative work • Safely search for images online • Communicate safely online • Keep personal information safe • Explore email to communicate safely • Apply online safety knowledge to help other make good choices • Understand my information online leaves a digital footprint • Search online using keywords to help topic work • Recognise if some websites are appropriate for children • Rate and review information websites • Identify kind and unkind behaviour online • Apply safe and sensible online behaviour to different situations • use safe search filters. 	<ul style="list-style-type: none"> • Know what cyberbullying is and how to address it • understand how websites use advertising • create strong passwords • understand some privacy settings • safely send and receive emails • explore different ways of online communication • identify hurtful messages & suggest how to respond • use search engines effectively • understand and avoid plagiarism • create a safe online profile • explain how to be a responsible digital citizen 	<ul style="list-style-type: none"> • identify spam emails and know what to do with them • write citations for websites used in research • create strong passwords • recognise when why are how photographs and videos may have been edited • apply online safety rules to real-life scenarios • find similarities and differences between in-person and cyberbullying • identify features of secure websites • identify benefits and pitfalls of online relationships • identify how the powerful role media plays in shaping ideas about girls and boys • apply online safety knowledge to my online activities
Key Vocabulary	safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.	safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.	https, spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.

Digital Literacy & Multi-Media			
Foundation	Year 1 & 2	Year 3 & 4	Year 5 & 6
<p>Expressive Arts and Design Creating with Materials</p> <ul style="list-style-type: none"> • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. 	<ul style="list-style-type: none"> • add text strings, text boxes and show and hide objects and images, manipulating the features. • use various tools, such as brushes, pens, eraser, stamps and shapes, and set the size, colour and shape. • use applications and devices in order to communicate ideas, work, messages and demonstrate control. • use software to record sounds & change sounds recorded. 	<ul style="list-style-type: none"> • create different effects with different technological tools, demonstrating control • use appropriate keyboard commands to amend text on a device • use applications and devices in order to communicate ideas, work, and messages • save, retrieve and evaluate work, making amendments • insert a picture/text/graph/hyperlink from the internet or a personal file • publish animation and use a movie editing package to edit/refine and add titles. 	<ul style="list-style-type: none"> • use the skills already developed to create content using unfamiliar technology. • select, use and combine the appropriate technology tools to create effect. • review and improve their own work and support others to improve their work. • Keep digital work organised, named and in a suitable file structure • collect audio from a variety of resources including own recordings and internet clips. • use a digital device to record sounds and present audio. • trim, arrange and edit audio levels to improve quality. • publish their animation and use a movie editing package to edit/refine and add titles and other features.
Key Vocabulary	paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present, commands, add sound.	draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck, audio, sound, video, movie, embed, link, file format, animate, animation, still image, flip book, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame.	window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide, audio, record, edit, play stop, skip, waveform, input, output, record, edit, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload

Technology in Our Lives			
Foundation	Year 1 & 2	Year 3 & 4	Year 5 & 6
<p>Understanding the World</p> <ul style="list-style-type: none"> • Explore how things work 	<ul style="list-style-type: none"> • Understand meaning of – ‘information technology’ & ‘Computing’ • recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping • Identify external parts of computers. • use links to websites to find information. • Apply basic evaluation to websites 	<ul style="list-style-type: none"> • Understand key internal parts of computers such as motherboard & CPU • How has technology changed • How does technology impact our lives today? • Design a piece of technology for the future • Conduct an App review and design task • How is technology and communication used today for mass events 	<ul style="list-style-type: none"> • use strategies to check the reliability of information on websites (cross-check with another source such as books). • talk about the way search results are selected and ranked. • Speak about copyright and acknowledge the sources of information. • Explore a website, discuss the different types of media used on websites and know that websites are written in HTML. • Recognise the common features of a web page. Suggest media to include on my page & draw a web page layout that suits my purpose. • Say why I should use copyright-free images. Find copyright-free images. Describe what is meant by the term ‘fair use’ • Add content to my own web page. Preview what my web page looks like. Evaluate what my web page looks like on different devices and suggest/make edits. • Explain what a navigation path is. Describe why navigation paths are useful. Make multiple web pages and link them using hyperlinks. • Explain the implication of linking to content owned by others. Create hyperlinks to link to the work of other people. • Evaluate the user experience of a website.
Key Vocabulary	Computer, Personal Computer (PC), laptop, tablet, key, keyboard, monitor, screen, hard drive (HDD), flash drive, USB drive, pen drive, memory, speakers, chip, cable, printer, microphone, headphones, webcam, modem, virtual reality headset, card reader, device, hardware,	KS1 Vocab + technology, wearable tech, RAM, Motherboard, CPU, processor, 3D glasses, Artificial Intelligence, Electric Cars, filter	Charles Babbage, Lady Aida Lovelace, Tommy Flowers, Bletchley Park, Enigma, Bill Gates, Steve Jobs, Amazon, Google, Facebook, YouTube, Elon Musk, Website, web page, browser, media, Hypertext Mark-up Language (HTML) logo, layout, header, purpose, Copyright, fair use, home page, preview, evaluate, device, Google Sites, breadcrumb trail, navigation, hyperlink, subpage, Hyperlink, evaluate, implication, external link, embed

Coding & Programming			
Foundation	Year 1 & 2	Year 3 & 4	Year 5 & 6
<p>PSED: Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</p>	<ul style="list-style-type: none"> • give commands one at a time to control direction and movement, including straight, forwards, backwards, turn. • control the nature of events: repeat, loops, single events and add and delete features. • give a set of instructions to follow and predict what will happen. • improve/change their sequence of commands by debugging. 	<ul style="list-style-type: none"> • use logical thinking to solve an open-ended problem by breaking it up into smaller parts. (Decomposition) • write a program, putting commands into a sequence to achieve a specific outcome. • give a set of instructions to follow and predict what will happen. • keep testing a program and recognise when it needs to be debugged. • use variables to create effect. 	<ul style="list-style-type: none"> • Design, build and code working models to solve problems or add explanation. • use external triggers and infinite loops to demonstrate control. • use conditional statements and create & edit variables. • decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program. • keep testing a program and recognise when it needs to be debugged.
Key Vocabulary	algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat, forever, invisible, grow, shrink.	decompose, decomposing, logical sequence, flowchart, sprite, block, command, algorithm, answer, correct, errors, program, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable, loops, repeats.	algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, object, program environment, decompose, variable

Data Handling			
Foundation	Year 1 & 2	Year 3 & 4	Year 5 & 6
			<ul style="list-style-type: none">• construct data on the most appropriate application.• know how to interpret data, including spotting inaccurate data and comparing data.• use keyboard shortcuts and functions to input data on spreadsheets and create formulas for spreadsheets.• add data to an existing database.
Key Vocabulary			insert, table, spreadsheet, cell, row, column, formula/formulas, calculate, format, edit, insert, ascending, descending.

	Year 7
Term1	Topic
1	Expectations - Computing Policy – Logging onto the school system
2	Utilising Learning Resources – Teams / GCSE Pod / Office 365 & OneDrive / Canva / Online Software Introduction
3	CAT TESTING
4	Code.org – Programming constructs – Course 3 - https://studio.code.org/s/course3?section_id=3667797
5	Code.org – Programming constructs – Course 3 - https://studio.code.org/s/course3?section_id=3667797
6	Code.org – Programming constructs – Course 3 - https://studio.code.org/s/course3?section_id=3667797
7	Test
1	Binary Number System – Binary to denary conversions / Denary to binary conversions
2	Binary Number System – Binary Addition and Binary Subtraction
3	Binary Testing
4	Binary text – Representing text using binary / Character sets
5	Logos – Creating Vector Graphics – we use www.vectr.com
6	Logos - Creating Vector Graphics – we use www.vectr.com
7	Logos - Creating Vector Graphics – we use www.vectr.com
Term2	
1	Hardware – Input / Output Devices – Primary and Secondary Storage
2	Software – Applications Software / Utilities Software / Operating Systems
3	Test
4	Menu Design – Creating / Editing Bitmap Graphics - https://www.photopoea.com/
5	Menu Design – Creating / Editing Bitmap Graphics - https://www.photopoea.com/
1	Turtle Academy – Drawing using programming – Text based programming - https://turtleacademy.com/lessons
2	Turtle Academy – Drawing using programming - Text based programming - https://turtleacademy.com/lessons
3	Raising Aspirations – Careers in computing
4	Logic Gates – And, Or & Not Gates – Truth Tables – Boolean Algebra
5	CodeCombat – Python Coding – Introduction to coding in Python - https://codecombat.com/
6	Test

Term 3	
1	Python Variables – Learning to Code in Python – We use an online IDE - https://create.withcode.uk/
2	Python inputs/output – Learning to Code in Python – We use an online IDE - https://create.withcode.uk/
3	Python conditionals – Learning to Code in Python – We use an online IDE - https://create.withcode.uk/
4	Python challenges – Learning to Code in Python – We use an online IDE - https://create.withcode.uk/
5	Minecraft EDU – Python in Minecraft EDU - https://education.minecraft.net/en-us
6	Test
1	Microbits – Introduction to the Microbit / Using IDE / Downloading programs to the Microbit - https://makecode.microbit.org/
2	Microbits – Creating a mood badge and a dice - https://makecode.microbit.org/
3	Microbits – Creating a rock paper scissors game / Flappy bird game - https://makecode.microbit.org/
4	Web design – Designing a website for a set brief
5	Web design – Creating Assets for a website using CANVA - https://www.canva.com/
6	Web design – Building a website using WIX - https://www.wix.com/
7	Web design - Building a website using WIX - https://www.wix.com/

Cycle A				Cycle B			
	Autumn	Spring	Summer		Autumn	Spring	Summer
KS1	Coding & Programming -Toys & Algorithms	Online Safety - SMART Rules and Email (2 Wks)	-	KS1-	Key Skills - Laptop / Ipad Word Processing	Online Safety - Safe Searching & Digital Footprint (2Wks)	-
	Online Safety - Owning my work & personal Information (2 Wks)	Digital Literacy -Art and Music	Technology in our Lives: External parts of computers / technology outside		Online Safety - Keywords & Website appropriateness (2 Wks)	Digital Literacy - Animated Stories	Coding & Programming (Code.org)
LKS2	Key Skills: Computing Systems and Networks	-	Online Safety - Passwords & Privacy (2 Wks)	LKS2	Online Safety - Search Engines & Plagiarism (2 Wks)	Technology in our lives: Internal Computer parts & Changing Technology	Online Safety - Online Profile & Digital Citizenship
	Online Safety - Cyberbullying & Advertising (2 Wks)	Coding & Programming	Digital Literacy: - digital book publication		Digital Literacy: PowerPoint Presentations	Coding and Programming:	Digital Literacy: - Stop Frame Animation
UKS2	Online Safety - Spam & False Photography	Online Safety - Bullying &/or Cyberbullying (2 Wks)	Algorithms & Programming	UKS2	Digital Literacy: - Website Publication	Online Safety - Online relationships & representations of girls and boys (2 Wks)	-
	Digital Literacy: Animated PowerPoint Presentations	Key Skills: How offline and Online Systems work	Databases & Spreadsheets		Online Safety - Website Security & Historical developments in technology	Coding & Programming	Digital Literacy: - Making Movies