

Sequence of knowledge over time to meet curriculum end points

	Knowledge	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Digital Literacy	Using technology safely	Internet safety rules and keeping safe.	Avatar and profile safety online.	To understand how different activities and responses online affect our feelings	Know the implications of when we post anything online.	To understand how Pop ups work.	To understand Password safety and how complexity keeps your accounts safe.	To understand cyberbullying and how to respond.
	Keeping Personal information private	Understanding what information should and should not be online.	Knowing how to respond to personal questions online and having the right to say no!	To understand what could happen if photos/pictures are shared.	Investigating different levels of privacy. What information should we protect? Public or private?	To understand about catfishing and scams online	To understand how much you share online exposes your safety	To understand Password safety and different layers of security such as 2 factor authentication. To understand email scams.
	Identify where to go for help and support if they have concerns over content.	Understanding who our trusted adults are.	Children know what to do if something is concerning them – trusted adults at home and in school.	Identifying 4 trusted adults. Looking at what is and what is not acceptable to post online.	To know there are different ways to take actions. To know they don't have to deal with concerns alone.	To recognise if online information is credible. Fake news and disinformation.	To understand what to do if your personal information is leaked.	To understand how to report cyberbullying.
	Using IT beyond school	Understanding of only talking online to people we know	Putting media stories into context and look at sites that help us like Childline and CEOP Using technology outside of school.	Understand that not everyone online is telling the truth.	To understand what a positive online presence looks like.	Google Interland – putting learning into practice – e-Safety class assembly	To introduce the CV and what it is used for.	To understand why social media sites don't charge to be used. To understand bias and fake news. To code an app that is useful outside of school
	Using devices effectively – mechanics Automaticity	Using a mouse and starting to learn key letters on a keyboard.	Log in practice Developing keyboard and mouse skills. To understand what cut, copy and paste does.	Developing touch typing skills. To understand how the internet works and how computers help us learn.	Topic related word processing and presentation skills. Saving and retrieval.	To use keyboard shortcuts for Cut, copy and paste Ctrl C, V	To use copy, paste in spreadsheet to automate formula.	To use different types of mouse and keyboard combination such as drag and drop and two finger scrolling.
	Searching and selecting	Selecting the correct app	Using safe search and understanding why.	Identifying websites that are appropriate to my age. Using search engines and rating favourite websites	Selecting credible sources for digital artefacts. Saving to a folder for easy access.	To understand how search engines display information. How to get better search results.	Searching for templates to build your own work on.	Learn about advanced search algorithms such as linear, binary and hashing, using a battleship game.
Information	Knowledge	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Use technology purposefully to organise,		Learn how to find, save, show, and send images on iPad devices.	Using a computer to edit saved images.	Create and save documents to do with topic.	To use Word and PowerPoint to display work/projects	Create a website using SharePoint to advertise a business. Understand the use of copyright.	How to save video/picture files to cloud storage (iCloud, OneDrive) for later use.

	store and retrieve digital content.							
	Use technology purposefully to create and manipulate digital content.	Using PicCollage to manipulate photos (Shrink, expand, turn)		To use photo editing software to discover different layers in images.	To import images into documents and manipulate size and wrapping.	To use more advanced photo editing functions	Create and understand animation principles and use software to create animations	Use Computer Aided Design (CAD) software to create and manipulate 3D shapes
	Select, use and combine a variety of software (including internet services) on a range of digital devices. KS2			Use book creation apps to create eBooks.	Use browsers and apps/programs to import and display work	To use different apps/programs to photo edit to see how skills are transferable.	To use different software and platforms to create animations.	To use video creation tools and programs to create layers and effects for a video project. Use Apple and Windows devices to sync and transfer content.
	Design and create a range of programs, systems and content that accomplish given goals.			To use a range of applications to save and edit work to produce a newly created image.	To collect and organise topic work digitally to produce a display piece.	Use different programs to create videos using a range of techniques such as green screen and stop motion animation.	Using spreadsheets, we create formula that automatically completes the tasks at hand.	Video creation and effects. 3D modelling.
Computer Science	Knowledge	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Understand what algorithms are	Introduction to the word Algorithm and what it means	Using a list of instructions to complete coding tasks.	Using instructions in the right order to achieve desired results	To understand how different platforms have different but similar instructions	To use algorithms to make aspects of a game work.	To use a list of instructions to create a 3D game world.	To use algorithms to create an app that links to the pupils secondary schools website
	Create and debug simple programs (that accomplish specific goals – KS2)	Following instructions and looking at order.	Learning that debugging is fixing wrong code – Tynker Jnr – directional problem solving. Up/down/left/right Getting code in the right order	Fixing the wrong code – Scratch Jnr Getting the right amount of code to solve the problem.	Presented with code problems and children must detect the error and debug the programme.	Create a maze game that others will play. Debug the ways others will try and cheat.	Create own controllable game that includes score, timer and lives. The game will need debugging in order to work correctly.	Developing an app to share with others – pupils must debug problems for app to work successfully.
	Use logical reasoning to predict the behaviour of simple programs (and to detect and correct errors – KS2)			introduce the idea of how to predict the behaviour of code before it has run.	Predicting code using questions and showing errors to allow pupils to correct the code.	Use prediction to plan how someone might cheat in a maze game and patch any issues.	Predict the path of sprites that have been coded.	Predict how functions will act when coding an app.
	Use sequence, selection and repetition in programs; work with variables.		To introduce the term REPEAT and how programs can loop an action	To repeat a sequence of events and predict the behaviour.	To use repeat blocks to code a looped solution to problems.	To code forever a sequence that helps our maze game run without errors or cheating.	Introducing Variables and how they are used to code a scoreboard, timer and life counter.	Using Logic to code loops of code when needed.

Controlling or simulating physical systems	Using simple commands to control a sprite's direction	Using simple commands to reach a specified destination.	Using commands to create a range of motion. Using 1 sprite to control another.	Using commands to create a simple game.	Creating a simple game from scratch using a variety of control methods.	Advancing from 2D to 3D control within a game building environment.	Designing an app - control hyperlink and website destination.
Solve problems by decomposing them into smaller parts	One direction at a time.	Phrase "What do I need to do next?" to be used to draw out the next step.	Code one aspect at a time.	Code one solution at a time.	Code one sprite until it works, then move onto the next.	Code the game until it works, add variables and other decorations after.	Code one app button at a time. Copy and edit code later.
Work with various forms of input and output	Taping the screen. Using 2 fingers to zoom and twist.	Using the screen keyboard.	Drag and drop.	Using a keyboard and mouse	Using multiple keys at the same time.	Using cloud sync to output to different devices.	Using QR codes to output app updates. To use different platforms for coding.
Understand how networks can provide multiple services, such as the world wide web.					To understand how a network used physical infrastructure to connect devices. How local devices communicate What an IP address it and how it is used on the world wide web	Now networks search internally to return results. Using cloud networks to share documents.	
Collecting, analysing, evaluating, and presenting data and information.		Create an eBook	Using Word to collect and save topic work.	Using PowerPoint to present work.	Using a website/Microsoft Sway to present information.	To understand spreadsheet formula. Data is collected, entered and presented in spreadsheets shared via Teams.	Creating a mobile device app to display information