Whole School Computing Long Term Plan

Information Technology: Use technology purposefully to create, organise, store, manipulate and retrieve digital content

Digital Literacy: Use technology safely and respectfully, keeping personal information private: identify where to for help and support

Computer Science: Understand what algorithms are; how they are implemented as programs on digital devices
Create and debug simple programs
Use logical reasoning to predict the behaviour of simple programs

- Most units will contain elements of all strands
- ESafety is key and should be incorporated into each of the modules
- ESafety is also covered within the PSHE curriculum

EYFS Through continuous provision and other lessons children in the EYFS are exposed to a variety of technology. They have access to Beebots, iPads, Laptops, Computers and Interactive Whiteboards.

KS1	Autumn		Spring		Summer	
A	**Computing Systems** Recognising technology in school and using it responsibly.	**Digital painting** Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally	**ESafety Day** **Moving a robot** Writing short algorithms and programs for floor robots, and predicting program outcomes. (Beebots)	**Grouping data – branch models** Exploring object labels, then using them to sort and group objects by properties.	**Digital writing** Using a computer to create and format text, before comparing to writing non-digitally.	***RodoCodo***
B	**Computing Systems** Identifying IT and how its responsible use improves our world in school and beyond.	**Digital photography** Capturing and changing digital photographs for different purposes.	**ESafety Day** **Stop animation** Create a sequence of images to form a short animation (Stop motion studio)	**Electronic communication** Looking at different forms of communication Sending and receiving emails safely (School email)	**Robot algorithms** Creating and debugging programs, and using logical reasoning to make predictions. (Beebots)	***RodoCodo***

- RodoCodo – Teachers can choose to break-up RodoCodo's 6 units and teach them throughout the year alongside other units if it fits in with the objectives.

LKS2	Autumn		Spring		Summer	
A	Lights, Camera, Action War & Remembrance		Poles Apart The Americas		The Olympics Romans	
	Computing Systems Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks	**Sequencing Sounds** Creating sequences in a block-based programming language to make music.	**ESafety Day** **Data Handling** Building and using branching databases to group objects using yes/no questions.	**Desktop Publishing** Creating documents by modifying text, images, and page layouts for a specified purpose.	**Movie Maker** Using pictures and a green screen to create a news report/ trailer/ advert	***RodoCodo***
B	Earth & Beyond The Ancients		Material Ages Mountain & Rivers		Invaders British History	
	Computing Systems Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	***RodoCodo***	**ESafety Day** **Photo Editing** Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.	**Presentation skills** Collaborate by sharing a document to create a presentation, inserting images, and text layouts	**Audio production** Capturing and editing audio to produce a podcast, ensuring that copyright is considered	**Repetition in Games** Using a block-based programming language to explore count-controlled and infinite loops when creating a game

- RodoCodo – Teachers can choose to break-up RodoCodo's 6 units and teach them throughout the year alongside other units if it fits in with the objectives.

UKS 2	Autumn			Spring			Summer	
A	Lights, Camera, Action War & Remembrance			Poles Apart The Americas			The Olympics Romans	
	Systems and searching Recognising IT systems around us and how they allow us to search the internet.	***RodoCodo***		**ESafety Day** **Video production** Planning, capturing, and editing video to produce a short film	**Presentation skills** Collaborating by sharing a document, focussing on hyperlinks, sounds and images		**Vector drawing** Creating images in a drawing program by using layers and groups of objects.	**Robot algorithms** **Lego WeDo** (D&T links)
B	Earth & Beyond The Ancients			Material Ages Mountain & Rivers			Invaders British History	
	Communication and collaboration Identifying and exploring how data is transferred and information is shared online.	***RodoCodo***		**ESafety Day** **Flat-file databases** Using a database to order data and create charts to answer questions.	**Introduction to spreadsheets** Answering questions by using spreadsheets to organise and calculate data		**Webpage creation** Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation	**Sensing designing and coding** a project that captures inputs from a physical device. **Lego WeDo**

- RodoCodo – Teachers can choose to break-up RodoCodo's 7 units and teach them throughout the year alongside other units if it fits in with the objectives.