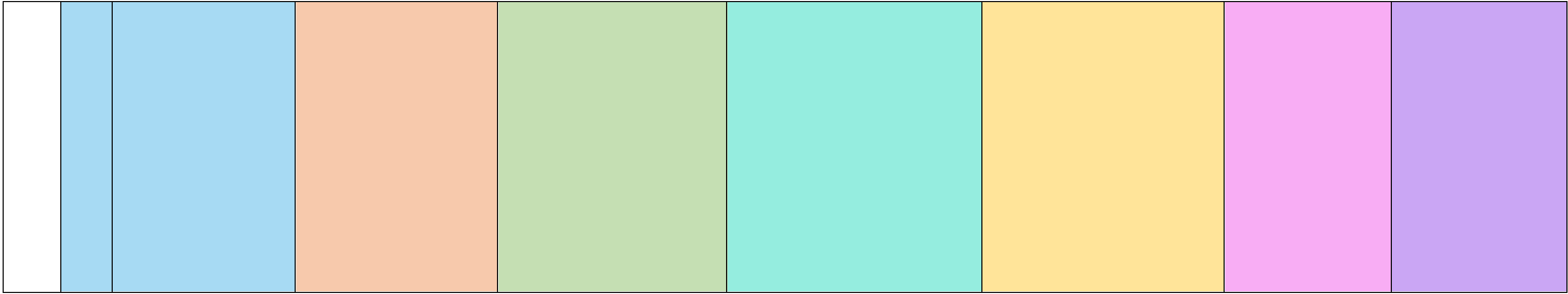# St Clements School Progression Map

Subject: COMPUTING (Information Technology)

At St Clements School, we aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever-changing digital world. Knowledge and understanding of computing is of increasing importance for children's future both at home and for employment. Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. These strands are revisited repeatedly through a range of themes during children's time in school to ensure the learning is embedded and skills are successfully developed. Our intention is that Computing also supports children's creativity and cross curricular learning to engage children and enrich their experiences in school.

Autumn	Nursery	EYFS	Key Stage 1			Key Stage 2			
		Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Knowledge			To understand why pictograms are useful. To collect and organize information to solve a problem. To understand that computers can show real events and things. To use a mouse to move things accurately on screen,	To understand what an animation is. To understand the premise of a stop-frame animation. To know what a blog is and how it will be used in the classroom. To log into the class blog. To understand the word wide web and how it has developed throughout time. To consider how technology changes with time. To understand that the world wide web contains large amount of information. To use links to navigate a website.	To understand the internet is many computers that are connected. To understand that some of the services available on the internet. To use basic navigation skills to browse the world wide web. To understand how information in a database is organised. To understand the advantages of a computer database over a paper one. To know what a network is. To know key parts o a computer network.	To sort record cards using field names. To understand that information can be stored as numbers, text and choices (yes/no)	To understand that digital tools can be used to create images. To understand that vectors images are made up of shapes and lines. To use digital tools to improve detail in images. To understand the difference between 2D and 3D shapes. To become familiar with basic 3D modelling tools. To understand that the world wide web is one of the services of the internet. To know that the world wide web consists of many websites and web pages that can be accessed using the internet.	To understand that a computer network is a group of computers that are connected. To know that computer networks allow users to communicate and share. To understand that the internet is many networks that are connected to each other. To understand that spreadsheets can be used to store numerical data and to make calculations. To enter a formula to calculate totals. To understand that graphs and charts can be created and easily changed from spreadsheet data.	
Skills		use a keyboard sometimes with support use a mouse or touch to make choices with help have created simple digital content with support have explored a limited range technology, digital content and tools be able to relate some computer models to real life with support explore simple computer models	have entered words using a keyboard use a mouse to point, click and drag objects around a screen with help. have created digital content using IT tools have saved a file with support have explored a limited range of tools access a website using desktop shortcuts navigate simple websites with support	navigate a document using arrow keys and a mouse use the backspace button and the delete button to remove text use tools to create simple presentations that communicate meaning make choices about applications and tools to use for a particular purpose locate, edit and save different versions of their work navigate around a website using hyperlinks and the back button type web addresses into a web browser create Internet favourites	combine graphics with text use appropriate effects and re-size graphics copy text from an internet page to a document copy images from an internet page save, print and retrieve work use software, computers and devices to make simple presentations and create things enter a URL for a website with support Identify some links within web content and navigate with purpose.	combine graphics with text use bold, italic and underline. know how to undo and redo. align text left, right, centre and justify and know to use them insert images and to manipulate them assign desktop shortcuts to applications and work	understand that information in the form of text, sound and pictures can be combined to create digital content and communicate with an audience recognize the audience when designing and creating digital content create digital content that incorporates text and image choose and use the appropriate advanced features of word processing or presentation software to increase their efficiency when matching their work to their audience carry out multi-conditioned searches in databases to find answers to a variety of questions with assistance use the sort facility of a database to answer questions create own questions to be answered by searching a database	understand that information in the form of text, sound and pictures can be combined to create digital content create digital content (e.g. a webpage) that incorporates text, images and sound	

Spring	EYFS	Key Stage 1		Key Stage 2			
	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge		To understand that algorithms are implemented as programs in a range of digital devices. To create a pictogram using collected data. Sorting information. To understand that computers can be used to make choices. To understand that computers can be used to model an environment where choices can be made.	To know how to respond to the writing of others.] To know how to post on a blog. To know how to respond to someone else's post on the class blog. To share knowledge through multi-media presentations. To know that the world wide web can be used to answer questions. To navigate a website using hyperlinks. To locate specific information using a website.	To use search terms when looking for information using a search engine. To know the basic steps that can help distinguish safe and credible websites. To find and enter information to create additional records in a database. To understand how information is exchanged between devices. To understand that the internet ter is the physical connection between computers and networks.	To understand that storing information in an organised way helps answer questions.	To understand that vector images are constructed of layers. To design vector mages. To create vector images. To know that web sites are written in HTML code. To read basic HTML code.	To know that a router sends/receives information as packets of data. To know that the internet search engines maintain, and rank, a list (or index) of other websites available on the world wide web. To understand that the SUM function can be used to create formulas.
Skills	use a keyboard to make choices use the mouse or touch to select icons and items move onscreen objects talk about the technology used at home and in school operate digital equipment use technology and digital content to play and learn begin to understand that computers can be used to represent real life and imaginary situations explore simple computer models and talk about what happens if...	enter simple sentences using a keyboard use a mouse to point, click and drag objects around a screen use the mouse to select icons and items print work save work with assistance navigate a website using buttons and image links	combine graphics with text use appropriate effects and re-size graphics copy text from an internet page to a document copy images from an internet page save, print and retrieve work use software, computers and devices to make simple presentations and create things enter a URL for a website with support Identify some links within web content and navigate with purpose.	combine graphics with text use bold, italic and underline. know how to undo and redo. align text left, right, centre and justify and know to use them insert images and to manipulate them assign desktop shortcuts to applications and work	use the more advanced features of applications (Eg. word processing or presentation software) to help them match their work to their audience send an email. reply to an email use the search facility in a database to find the answer to questions carry out searches involving more than one condition to find answers to a variety of questions, sometimes with help confidently enter URLs into an address bar of a browser	understand that digital content needs to be planned to take account of the intended audience, the content, and the layout of information discuss the rationale behind their digital creations including content, media used and layout develop and refine digital content for a specified audience	plan, design and create digital content that incorporates text, images and sound and communicates with an audience be able to discuss the rationale behind their designs develop and refine digital content

Summer	EYFS	Key Stage 1		Key Stage 2			
	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Knowledge		Present data using a graph. To understand that a computer model is not an exact replica of real-life environments and/or scenarios.	To explain what you think and why. To use a blog t demonstrate and share learning To reflect on work and make improvements. To plan/produce a presentation of research finding. To collect information from a number of different online sources and check they are the same. To create an interactive eBook.	To understand that copyright is an author's right of ownership and it is illegal to steal other people's material. To understand how data travels through a network. To understand that devices on network have unique address.	To search a database to answer questions To use the information in a database to create a simple chart.	To evaluate vector images and make improvements. To understand that graphical models can easily be changed. To use features of graphical modelling software to develop a 3D model. To evaluate and improve 3D models. To understand how HTML code provides structure for web content.	To know that the web pages are written in HTML code. To recognize and use basic HTML syntax. To use spreadsheets to model a costing exercise.
Skills	use a mouse or touch to select, tap/click and drag objects around a screen enter simple words using a keyboard and made choices have created and saved their work have printed work experienced a wider range of technology and tools to play and learn explore a variety of computer models understand that a computer can be used to represent real life and imaginary situations	have created and saved different versions of their work be able to compare creating their work using IT with manual methods be able to explain why a particular tool has been chosen and its effect access a website by typing a simple url navigate a website using hyperlinks, buttons and image links	combine graphics with text use appropriate effects and re-size graphics copy text from an internet page to a document copy images from an internet page save, print and retrieve work use software, computers and devices to make simple presentations and create things enter a URL for a website with support Identify some links within web content and navigate with purpose.	combine graphics with text use bold, italic and underline. know how to undo and redo. align text left, right, centre and justify and know to use them insert images and to manipulate them assign desktop shortcuts to applications and work	use the more advanced features of applications (Eg. word processing or presentation software) to help them match their work to their audience send an email. reply to an email use the search facility in a database to find the answer to questions carry out searches involving more than one condition to find answers to a variety of questions, sometimes with help confidently enter URLs into an address bar of a browser	understand that digital content needs to be planned to take account of the intended audience, the content and the layout of information discuss the rationale behind their digital creations including content, media used and layout develop and refine digital content for a specified audience	create digital content that incorporates images, sounds and text and is organised into pages that matches the needs of a specified audience critically analyse digital content and makes judgements about its suitability for a specific audience

Impact (End Points)						
EYFS	Key Stage 1		Key Stage 2			
Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6