Pikemere School Long Term Map – Computing

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	**Computing systems and networks**	**Creating media**	**Programming A**	**Data and information**	**Creating media**	**Programming B**
Year 1	**Technology around us** Recognise and use technology in school responsibly	**Digital painting** Choose appropriate tools to create art and make comparisons with working non-digitally	**Moving a robot** Write short algorithms and programs for floor robots	**Grouping data** Explore object labels, then use them to sort and group objects by properties	**Digital writing** Use a computer to create and format text, before comparing to writing non-digitally	**Programming animations** Design and program the movement of a character on screen to tell stories
Software		Paintz.app	Bee-Bots	PowerPoint or Word	Word or j2e.com/jit	Scratch Jnr
Year 2	**Information technology around us** Identify how IT improves our world in school and beyond	**Digital photography** Capture and change digital photographs for different purposes	**Robot algorithms** Create and debug programs, use logical thinking to make predictions	**Pictograms** Collect data in tally charts and use attributes to organise and present data on a computer	**Digital music** Use a computer as a tool to explore rhythms and melodies, create a musical composition	**Programming quizzes** Design algorithms and programs that use events to trigger sequences of code to make an interactive quiz
Software		iPad camera	Bee-Bots	J2e.pictogram	Chrome Music Lab	Scratch Jnr
Year 3	**Connecting computers** Identify inputs, outputs, processes and how devices can be connected to networks	**Stop-frame animation** Capture and edit digital still images to produce a stop-frame animation that tells a story	**Sequencing sounds** Create sequences in a block-based programming language to make music	**Branching databases** Build and use branching databases to group objects with yes/no questions	**Desktop publishing** Create documents, modify text, images and page layouts for a given purpose	**Events and actions in programs** Write algorithms and programs that use a range of events to trigger sequences of actions
Software		I motion/Stop Motion Studio	Scratch.mit.edu	J2e.com/branch	Canva	Scratch
Year 4	**The internet** Recognise the internet as a network of	**Audio editing** Capture and edit audio to produce a podcast,	**Repetition in shapes** Use a text-based programming language	**Data logging** Recognise how and why data is collected	**Photo editing** Manipulate digital images and reflect on	**Repetition in games** Use a block-based programming language

	networks and why we should evaluate online content	ensuring that copyright is considered	to explore count-controlled loops when drawing shapes	over time, use data loggers to carry out an investigation	the impact of changes and whether the required purpose is fulfilled	to explore count-controlled and infinite loops when creating a game
Software		Garage band or Audacity	Turtle academy	Data Harvestvu Easysense2 app	Paint.net	Scratch
Year 5	**Sharing information** Identify and explore how information is shared between digital systems	**Video editing** Plan, capture and edit video to produce a short film	**Selection in physical computing** Explore conditions and selection using a programmable microcontroller	**Flat-file databases** Use a database to order data and create charts to answer questions	**Vector drawing** Create images in a drawing program by using layers and groups of objects	**Selection in quizzes** Explore selection in programming to design and code an interactive quiz
Software		iMovie	Crumble software	J2e platform	Power point and Publisher	Scratch
Year 6	**Internet communication** Recognise how the WWW can be used to communicate and be searched to find information	**Webpage creation** Design and create webpages	**Variables in games** Explore variables when designing and coding a game	**Introduction to spreadsheets** Answer questions by using spreadsheets to organise and calculate data	**3D modelling** Plan, develop and evaluate 3D computer models of physical objects	**Sensing** Design and code a project that captures inputs from a physical device
Software		Google workspace or Power point	Scratch	Microsoft Excel or Google Sheets	Tinker CAD	Micro: bit