	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	**Understanding the World** Children to explore and discover functions of electronical devices. Children can roleplay with a range of technology, both functioning and model/broken devices to discover how they function.	**Physical Development** This unit will support the development of fine motor skills to become familiar with a range of input devices, including a keyboard.	**Expressive arts and design** The use of painting and graphics applications to further support and develop creativity using a tablet. The children will be able to create drawings of their chosen topic to produce on a drawing application on the tablet.		**Introduction to Programming** Physical programming using bluebots/code-a-pillar. Children could create a story about the Bee Bot's journey, such as around a local area or a country being studied, or they could sequence events within a story being studied. For example, children could guide the Bee Bot between different locations, characters and locations within Little Red Riding Hood.	
Year 1/Year 2 Cycle A	**Technology Around Us** Classify what is / is not technology in our classroom and school. How does technology help us?	**Digital Painting** create own paintings, while getting inspiration from a range of other artists. Consider their preferences when painting with, and without, the use of digital devices.	**Grouping Data** Use labels to put objects into groups and label these groups. Sort objects into different groups, based on the properties they choose. Sort objects into different groups to answer questions about data.		**Introduction to animation** On-screen programming through ScratchJr. Explore the way a project looks by investigating sprites and backgrounds. Use programming blocks to use, modify, and create programs. Explore program design through the introduction of algorithms.	
Year 1/Year 2 Cycle B	**IT Around Us** How is information technology being used for good in our lives? With an initial focus on IT in the home, learners explore how IT benefits society in places such as shops, libraries, and hospitals. Whilst discussing the responsible use of technology, and how to make smart choices when using it .		**Robot Algorithms** This unit develops learners' understanding of instructions in sequences and the use of logical reasoning to predict outcomes. Learners will use given commands in different orders to investigate how the order affects the outcome. They will also learn about design in programming.		**Digital Music** They will make patterns and use those patterns to make music with both percussion instruments and digital tools. Learners will share their creations and compare creating music digitally and non-digitally	**Pictograms** Learners will begin to understand what data means and how this can be collected in the form of a tally chart. . They will then progress onto presenting data in the form of pictograms and finally block diagrams.
Year 3	**Connecting computers** Understanding of digital devices, with a focus on inputs, processes, and outputs.	**Branching databases** Create physical and on-screen branching databases	**Desktop publishing** Use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents.		**Sequence in music** Explore the concept of sequencing in programming through Scratch.	
Year 4	**The Internet** Appreciate the internet as a network of networks which need to be kept secure.	**Data Logging** Collect data as well as access data captured over long periods of time	**Repetition in Shapes** Create programs by planning, modifying, and testing commands to create shapes and patterns.		**Audio Editing** Record audio themselves and use Audacity to produce a podcast, which will include editing their work.	
Year 5	**Computing systems and networks - Sharing information** *Develop their understanding of computer systems and how information is transferred between systems and devices.*	**Data and information – Flat-file databases** To use tools within a database to order and answer questions about data	**Creating media – Video editing** To develop and exposed to topic-based language and develop the skills of capturing, editing, and manipulating video.		**Programming – Selection in physical computing** To use physical computing to explore the concept of selection in programming through the use of the Crumble programming environment. To be introduced to a microcontroller and learn how to connect and program components.	
Year 6	**Computing systems and networks - Communication and collaboration** *Understand how the internet facilitates online communication and collaboration, evaluate different methods of communication. Understanding how to communicate responsibly by considering what should and should not be shared on the internet.*	**Web Page Creation-** *identify what makes a good web page and use this information to design and evaluate own website using Google Sites*	**Data and information – Spreadsheets** *Create graphs and charts, and evaluate their results in comparison to questions asked.*		**Programming– Sensing** *Simple programming where we build in and test in the programming environment before transferring it to a micro:bit.*	