Meadowbank Primary School
Lifelong Learners, Leaders of Change, Lasting Legacy

Computing Long Term Planning Map 2023-2024

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Foundation Stage 1 Understanding the World-Technology	**Computing systems** Explore how things work.	**Programming** Shows an interest in technological toys, real objects such as cameras, and touchscreen devices such as mobile phones and tablets.	**Programming** Shows an interest in technological toys with knobs or pulleys.	**Programming** Seek to acquire basic skills in turning on and operating some digital equipment.	**Programming** Operate mechanical toys.	**Computing systems** Know how to operate simple equipment, for example, uses a remote control, can navigate touch-capable technology with support.
Foundation Stage 2 Understanding the World-Technology	**Computing systems and networks Technology around us** Using an IPad to record and capture learning.	**Creating Media Digital painting** Draw a picture on a screen using a range of tools.	**Programming a beebot** Complete a simple program on an electronic device.	**Creating Media Non-Fiction** Create a non-fiction text using age appropriate software.	**Computing systems and networks Technology around us** Using a search engine to find and retrieve information.	**Creating Media Fiction** Create a story, with images, using age appropriate software.
Year 1	**Computing systems and networks Technology around us** Recognising technology in school and using it responsibly.	**Creating media Digital painting** Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.	**Programming A Moving a robot** Writing short algorithms and programs for floor robots, and predicting program outcomes.	**Data and information – Grouping data** Exploring object labels, then using them to sort and group objects by properties.	**Creating media Digital writing** Using a computer to create and format text, before comparing to writing non-digitally.	**Programming B Programming animations** Designing and programming the movement of a character on screen to tell stories.
Year 2	**Computing systems and Networks Information technology around us** Identifying IT and how its responsible use improves our world in school and beyond.	**Data and information Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer.	**Programming A Robot algorithms** Creating and debugging programs, and using logical reasoning to make predictions.	**Programming B Quizzes** Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.	**Creating Media Digital photography** Capturing and changing digital photographs for different purposes.	**Creating Media Making music** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.
Year 3	**Creating Media - Desk top publishing** Creating documents by modifying text, images, and page layouts for a specified purpose.	**Computing Systems and Networks** Connecting computers Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	**Programming A Sequencing** Creating sequences in a block-based programming language using espresso.	**Data and information Branching data bases** - Building and using branching databases to group objects using yes/no questions.	**Creating Media Stop Frame Animations** Capturing and editing digital still images to produce a stop-frame animation that tells a story.	**Programming B Events and actions in programs** Writing algorithms and programs that use a range of events to trigger sequences of actions using scratch.

Year 4	**Computing systems and networks Connecting computers** Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	**Creating Media Audio production** Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	**Programming A Sequencing** Creating sequences in a block-based programming language using espresso.	**Data and information Data Logging** Recognising how and why data is collected over time, before using data loggers to carry out an investigation.	**Creating Media Photo Editing** Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.	**Programming B Repetition in Games** Using a block-based programming language to explore count-controlled and infinite loops when creating a game.
Year 5	**Programming A Selection in physical computing** Exploring conditions and selection using a programmable microcontroller.	**Creating media vector drawings –** Creating images in a drawing program by using layers and groups of objects.	**Data and information Flat-file databases** Using a database to order data and create charts to answer questions.	**Computing systems and networks Systems and searching** Recognising IT systems around us and how they allow us to search the internet.	**Creating media – videos** Planning, capturing, and editing video to produce a short film.	**Programming B Selection in quizzes** Exploring selection in programming to design and code an interactive quiz.
Year 6	**Computing systems and Networks Communication and collaboration** Identifying and exploring how data is transferred and information is shared online.	**Creating Media Webpage creation** Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	**Programming A Variables in games** Exploring variables when designing and coding a game.	**Data and Information Introduction to spreadsheets** Answering questions by using spreadsheets to organise and calculate data.	**Creating Media 3D modelling** Planning, developing, and evaluating 3D computer models of physical objects.	**Programming B Sensing** Designing and coding a project that captures inputs from a physical device.