Computing

	Autumn		Spring		Summer	
EYFS	Pupils explore and discuss the technology around us through 'Understanding the World' ELG.					
Year 1	**Online Safety and Exploring Purple Mash** Learn how to login safely, open and save work. Explore Purple Mash programs.	**Grouping & Sorting** To sort items on the computer using a range of criteria. To introduce the term 'algorithm' to describe logically following a process.	**Lego Builders** To follow and create simple instructions on the computer. To consider how the order of instructions affects the result.	**Technology Outside School** To find and understand and record examples of where technology is used in the local community	**Maze Explorers** To be able to use the direction keys to complete the challenges successfully. To understand how to create and debug a set of instructions (algorithm).	**Coding** To understand that computer programs work by following instructions called code and begin to understand how code executes when a program is run. To plan and make a computer program.
Year 2	**Online safety** Learning how to search for and share information safely. Using Email as a tool to communicate and understand that information online leaves a digital footprint.	**Effective Searching** To understand the terminology associated with the Internet and searching. To create a leaflet to help someone search for information on the Internet.	**Creating Pictures** To learn about some key artists and their techniques. Use 2 Paint A Picture software to recreate artwork in the style of key artists.	**Making Music** To explore, edit and combine sounds using 2Sequence. To think about how sounds can represent emotions. To record their own sound and upload it into the Sounds section.	**Presenting Ideas** Know that digital content can be represented in many forms. To make a quiz, fact-file and presentation using appropriate software.	**Coding** Create a computer program that uses a range of features including collision detection, time-after command and different objects. Will debug simple programs.
Year 3	**Online Safety** To understand what makes a safe password. To consider if what can be read on websites is always true. To learn about the meaning of age restrictions symbols on digital media and devices. To know where to turn for help if they see inappropriate content or have inappropriate contact from others.	**Typing & Email** To introduce typing terminology. To understand the correct way to sit at the keyboard and learn how to use the home, top and bottom row keys. To learn how to use email safely and add an attachment.	**Branching Databases** To create a branching database. Know how to use and debug their own and others branching databases.	**Graphing** To enter data into a graph and answer questions. Can present the results in a range of graphical formats and use the sorting option to make analysis of their data easier.	**Presenting** Learn about and create a page in a presentation adding in media, animations and timings.	**Coding** Design and create a computer program that uses timer-every and repeat commands. Run, test and debug programs.

Year 4	**Online Safety** To learn about identity theft and how your digital footprint can aid identify theft. Learning about malware, plagiarism and how to maintain a good balance of screen time.	**Effective Searching** Locating information using a search engine and assess whether an information source may or may not be reliable.	**Spreadsheets** Explore tools in 2Calculate to create number games, input data, create line graph, budget and further develop understanding of place value.	**Hardware Investigators** To understand and recall the different parts of a computer.	**Logo** To use 2Logo to input instructions, create letters, use the repeat command to create shapes and use the procedure command.	**Coding** Use 2Code to design, code, test and debug programs to create a playable game which uses IF/ELSE statements, coordinates and number variables.
Year 5	**Online Safety** To understand responsibilities when online and where to get support. Know how to protect privacy online including maintaining secure passwords and the impact of sharing inappropriate information. Learn how to reference sources	**Word Processing** Creating documents from a blank page to include text, images, bullet points, text boxes and tables. Reviewing work to enhance its look and usability.	**Spreadsheets** Using formulae to convert and calculate. Using a spreadsheet to plan an event.	**Databases** Searching a database for information and contributing to a class database, and then creating a database.	**Game Creator** Use 2DIY 3D tool to design and create a game. Develop environment and characters for the game using animations and sounds.	**Coding** Programme a simulation using 2Code. Explore how decomposition, abstraction, friction, function and strings can be used in coding.
Year 6	**Online Safety** To identify the benefits and risks of giving personal information and device access to different software. To demonstrate a clear idea of appropriate online behavior. To identify the positive and negative influences of technology on health and the environment.	**Spreadsheets** Learn how spreadsheets can be used to show mathematical probability. Use spreadsheets and formulae to plan events and situations to track money.	**Networks** Know the difference between the World Wide Web and internet. Learn about WAN and LAN. Reflect on the development of the internet and comment on what the future of technology might look like.	**Understanding Binary** Examine how whole numbers are used as the basis for representing all types of data in digital systems through counting in binary and converting decimals to binary.	**Blogging** Identify the purpose of a blog, create own blog and comment on blogs.	**Coding** To design a playable game with a timer and a score. Plan and use selection, variables, launch Commands and functions. Use flowcharts to test and debug games.

Curriculum taught using Purple Mash programme.