



Computing Medium Term Plan - Year 1/2 - Cycle A

	Autumn 1 - Online Safety	Autumn 2 - Effective Searching	Spring 1 - Grouping and Sorting	Spring 2 - Creating Pictures	Summer 1 - Spreadsheets	Summer 2 - Coding
Big Concept						
Big questions	What is a password and why should we keep them safe? What is a digital avatar?	How can I search the Internet?	In what ways can we sort objects?	What are the main features of Impressionism? What are the main features of Pointillism? What are the main features of Surrealism?	What does a spreadsheet look like? How could you use a spreadsheet to add up values? How could you use the count and speak tools?	What is coding? Why is it useful to design before coding? What is an algorithm and why is it useful in coding? What does the repeat command and the timer command do?
Vision and rationale	Children will learn how to log in safely and learn how to find saved work in the Online Work area and find teacher comments. They will learn how to search Purple Mash to find resources and become familiar with the icons and types of resources available in the Topics section. The children will start to add pictures and text to work, to explore the Tools and Games section of Purple Mash and learn how to open, save and print.	Children will understand the terminology associated with searching and gain a better understanding of searching on the Internet. They will create a leaflet to help someone search for information on the Internet.	Children will sort items using a range of criteria and sort items on the computer using the 'Grouping' activities in Purple Mash.	Pupils will learn the functions of the 2Paint a Picture tool and learn about and recreate the Impressionist style of art (Monet, Degas, Renoir). Children will recreate Pointillist art and look at the work of pointillist artists such as Seurat. They will learn about the work of Piet Mondrian and recreate the style using the lines template. Also, children will learn about the work of William Morris and recreate the style using the patterns template. Finally, the pupils will explore surrealism and eCollage	Children will discover what a spreadsheet program looks like and learn how to open 2Calculate in Purple Mash. They will learn how to enter data into spreadsheet cells and how to use 2Calculate image tools to add clipart to cells. They will use 2Calculate control tools: lock, move cell, speak and count.	Children will understand what coding means. They will use design mode to set up a scene. Children will learn how to add characters, use code blocks to make the character perform actions, and learn how to use collision detection. Children will learn how to save and share work and to know the save, print, open and new icon. Children will understand what an algorithm is and learn how to design algorithms and then code them. They will compare different object types, use the repeat command, use the timer command and know what debugging is and debug programs.
Prior Knowledge	• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • Explore how things work. • Know and talk about the different factors that support their overall health and wellbeing: sensible amounts of 'screen time' • Explain the reasons for rules, know right from wrong and try to behave accordingly.	• Remember rules without needing an adult to remind them.	• Match their developing physical skills to tasks and activities in the setting. • Develop their small motor skills so that they can use a range of tools competently, safely and confidently.	• Explore, use and refine a variety of artistic effects to express their ideas and feelings.	• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge	• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge



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Key Vocabulary	Log in, Username, Password, Log out, My Work, Avatar, Notification, Topics, Tools, Save.	Internet, Search, Search Engine	Sort, Criteria	Impressionism, Palette, Pointillism, Share, Surrealism, Template	Arrow keys, Backspace key, Cursor, Columns, Cells, Clipart, Count Tool, Delete key, Image toolbox, Lock tool, Move cell tool, Speak Tool, Spreadsheet, Rows.	Action, Background, Button, Character, Code block, Code block, Code Design, Code, Coding, Collision Detection, Command, Object, Design Mode, Input, Scale, Program, Properties, When clicked, Stop command, Sound, When Key.
Key resources						
Computing skills	Computer science - I understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. - I know that an algorithm written for a computer is called a program. - I can work out what is wrong with a simple algorithm when the steps are out of order. - I can read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program. Information technology - I can sort simple digital content. - I can collate simple digital content. - I can edit simple digital content. - I can store simple digital content. - I can name, save and retrieve my work. - I can follow simple instructions to access online resources. Digital literacy - I understand what is meant by technology. - I can identify a variety of examples both in and out of school. - I can make a distinction between objects that use modern technology and those that do not. - I understand the importance of keeping information, such as my usernames and passwords.					