COMPUTING TREES OF KNOWLEDGE AND SKILLS PROGRESSION

	EYFS		Year 1			Year 2		
	Nursery	**Reception**	**Autumn Term** Who am I? Around the World	**Spring Term** To the Rescue	**Summer Term** Wonderful Westacre Animal Allsorts	**Autumn term** London's Calling The Great Fire of London	**Spring term** Famous Explorers Victorians	**Summer term** India Out and About
Knowledge	• Knowing that if different buttons are pressed on a toy, it will cause a different reaction. EG, lights, sounds, movement • Understand that if the interactive whiteboard is touched it will cause something to change or move	• Know that holding the left button on the mousepad allows you to draw in a paint programme • Knowing how to scroll and hold using the mousepad • Understand how to use Mini Mash on an interactive whiteboard	• Know what is meant by "Technology" • Understand the importance of keeping 'user names' and 'passwords' private • Know how to log in to their Purple Mash account • Know that their own on-line work is saved in their "My Work" folder on Purple Mash and know how to save and restore this work • Know how to open, retrieve, save and print work	• Know that the order of instructions affects the result • Know what the direction keys do • Know what an 'algorithm' is (a set of instructions used to solve a problem or achieve an objective) • Know that an algorithm written for a computer is called an 'programme' • Know how to create/debug an algorithm	• Know what 'coding' means • Know how coding is used in a computer programme • Know how to create a story with animations and sound using a computer programme • Know that you can access design mode to add characters and make a character move in a coding programme • Understand that collision detection allows you to avoid collisions in a coding programme • Understand that there are different types of technology that	• Revisit knowledge of what an 'algorithm' is • Know that algorithms can be successfully converted into code • Know that is important to search online safely and how to do this • Know that is important to share work online safely and how to do this • Know how to open and send emails • Know that information put online leaves a digital footprint or trail • Know the steps that can be taken to keep personal data	• Know what a 'spreadsheet' is and how to use the tools within it • Know what a 'binary tree database' is and how to use one • Know that copy and paste is easier than rewriting something • Know that you can collect data and use it to create a graph on a computer	• Revisit knowledge that is important to search online safely and how to do this • Know the functions of the 2Paint a Picture tools • Know that a story can be presented in different ways • Know how to create an interactive quiz • Know how to create a fact file

					are used outside of school	and hardware secure		
Skills	• Make a toy move, make a sound or light up by pressing the correct buttons. • Use an interactive whiteboard for simple activities.	• Use a mousepad on a laptop to create a picture in a paint programme. • Use a mouse pad correctly. • Use Mini Mash programme on the Interactive Whiteboard to create pictures and play games.	• Identify different types of technology used in and out of school • Log in and out safely • Add pictures and text to work	• Follow and create simple instructions on the computer • Use the direction keys • Create and extend a set of instructions (algorithm) • Make logical attempt to fix a code • Read code one line at a time and attempt to envisage the bigger picture of the overall effect of the programme	• Add an animation to a story • Add sound to a story, including voice recording. • Add backgrounds • Copy and paste pages • Use design mode to set up a scene • Add characters and make them move • Use collision detection • Save and share work • Print work • Open and create a new icon • Identify where technology is used	• Explain what an 'algorithm' is (a set of instructions to complete a task) • Create a simple programme that achieves a specific purpose • Design algorithms and code them • Compare different object types in a coding programme. • Use the repeat and timer command • De-bug programmes • Search on-line safely and accurately • Share work safely online in school and globally • Open and send emails with appropriate content	• Within a spreadsheet, use the tools: image, lock, move, cell, speak, totalling, equals and count • Copy and paste work within a spreadsheet • Create money calculations on a spreadsheet • Collect data and produce a graph • Use yes/no questions to separate information • Construct a binary tree to identify items • Answer questions using a binary tress database	• Search on-line safely • Re-create different styles of Art, using the 2 Paint a Picture programme (impressionist, Pointillist, lines and patterns template) • Make a present a story • Make a present a quiz about a story or class topic • Make a present a fact file on a non-fiction topic